National Stakeholder Strategy for Achieving Health Equity

OMH
U.S. Department of Health and Human Services
Office of Minority Health

National Partnership for Action to End Health Disparities

HEALTH DISPARITIES A particular type of health difference that is closely linked with social or economic disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, mental health, cognitive, sensory, or physical disability, sexual orientation, geographic location, or other characteristics historically linked to discrimination or exclusion.

HEALTH EQUITY Health equity is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health disparities.

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Foreword

We are united by missions that protect and improve the lives of individuals, families, and communities. Where Americans live, work, play, and learn directly impacts the health and vitality of our society. Evidence of growing inequalities in access to health care and disparities in health outcomes point to an immediate need for solutions that address the social, economic, environmental, and cultural determinants of health.

For racial and ethnic minorities, poor, and other underserved populations in the United States, the existence of health disparities is undisputed. In an era of increasing fiscal responsibility, an important part of the solution to ending disparities is to work across the public and private sectors using common objectives. Since the factors that affect health are varied and complex, the response must be equally varied and intricate. Understanding current health trends and realizing the social and economic benefits of health equity, the question that confronts us is: What actions can be taken to improve outcomes while concurrently improving the effectiveness and efficiency of our collective efforts and investments?

The vision for the *National Partnership for Action to End Health Disparities* (NPA) was shaped by the voices of individuals who shared their *lived* experiences and expertise through a series of regional conversations and meetings held by the Office of Minority Health (OMH), U.S. Department of Health and Human Services. The NPA brought together diverse organizations and individuals who shaped priority strategies for improving health and health outcomes of African Americans, Hispanics, Asian Americans, Native Hawaiians and Pacific Islanders, and American Indians and Alaska Natives.

This collaborative process involved individuals; community and faith-based organizations; tribal leaders; healthcare providers; health system representatives; academic and research faculty; employers; local, state, tribal, and federal public health officials; representatives from housing, education, transportation, veteran affairs, agriculture, environmental protection, commerce, and defense; and national associations. Through spirited dialogue, the NPA provided a forum for identifying and defining a strategic landscape of actions to advance the elimination of gaps in health care and health status.

The *National Stakeholder Strategy for Achieving Health Equity* and parallel Blueprints for Action are products of the NPA. Twenty common strategies were defined and organized around five core areas for improvement: awareness, leadership, health system and life experience, cultural and linguistic competency, and data, research, and evaluation. The *National Stakeholder Strategy*, which was posted on-line for public review, provides a roadmap—a starting point—of the collaborative strategies and collective actions. The information provided should serve as a menu from which specific actions at the local, state, tribal, regional, and national levels can be advanced.

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FOREWORD

We extend our appreciation to the individuals and organizations that contributed their time and energy; the Federal Interagency Health Equity Team for their thoughtful leadership; the Implementation and Evaluation Teams for their guidance on accountability, sustainability, and methods for evaluating progress; and to the National Visionary Panel (NVP), and National Health Disparities Plan Consensus Meeting participants for their expertise and feedback.

It is time to refocus, reinforce, and repeat the message that health disparities exist, that achieving health equity benefits all Americans, and that cooperative, leveraged, and evidence-based actions are necessary to reduce inequalities in health and healthcare outcomes. It is time for action—together we can, together we will.

Acknowledgements

More than two years ago, the Office of Minority Health (OMH) began meeting with communities and various organizations to begin developing strategies and actions to systematically address health disparities. These meetings led us to this National Stakeholder Strategy for Achieving Health Equity (National Stakeholder Strategy).

We are indebted to the many individuals who contributed their ideas, time, energy, and/or expertise during the community voices meetings; Regional Conversations; National Leadership Summits on Eliminating Racial and Ethnic Disparities in Health; the National Visionary Panel meeting; the National Health Disparities Plan Implementation and Evaluation meetings; the National Health Disparities Plan Consensus meeting; and myriad other meetings that led to the community-inspired strategies found within this National Stakeholder Strategy.

We also thank the State Offices of Minority Health for their contributions and support during the development process and for ensuring the voices of the communities were always heard. We are grateful for the ongoing contribution of our NPA partners and OMH staff who are working to support these partnerships. Federal Interagency Health Equity Team members have been steadfast in their support of a shared vision and responsibility for ending health disparities and achieving health equity. We thank them for their leadership and guidance during this process.

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Executive Summary

Executive Summary

OVERVIEW

In 1985, the United States Department of Health and Human Services (HHS) released a landmark report documenting the existence of health disparities for minorities in the United States. It called such disparities, "an affront both to our ideals and to the ongoing genius of American medicine." In the decades since the release of that report much has changed in our society—including significant improvements in health and health services throughout the nation. Nevertheless, health and healthcare disparities continue to exist and, in some cases, the gap continues to grow for racial and ethnic minorities, the poor, and other at-risk populations. Beyond the heavy burden that health disparities represent for the individuals affected, there are additional social and financial burdens borne by the country as a whole. These burdens constitute both ethical and practical mandates to reduce health disparities and achieve health equity.

New approaches and new partnerships are clearly needed to help close the health gap in the United States. The *National Partnership for Action to End Health Disparities* (NPA) was established to mobilize a nationwide, comprehensive, community-driven, and sustained approach to combating health disparities and to move the nation toward achieving health equity. The mission of the NPA is to increase the effectiveness of programs that target the elimination of health disparities through the coordination of partners, leaders, and stakeholders committed to action. The NPA is a critical and innovative step forward in combating health disparities by bringing individuals and organizations within the health sector together with other individuals and organizations whose work influences health.

The initial and primary product of the NPA, the *National Stakeholder Strategy for Achieving Health Equity* (National Stakeholder Strategy) provides an overarching roadmap for eliminating health disparities through cooperative and strategic actions. The other two key components of the NPA include: Blueprints for Action that are aligned with the *National Stakeholder Strategy* and guide action at the local, state, and regional levels; and targeted initiatives that will be undertaken by partners across the public and private sectors in support of the NPA.

In addition to the *National Stakeholder Strategy* launch, HHS jointly issued the first ever departmental health disparities strategic action plan. The HHS Action Plan to Reduce Racial and Ethnic Health Disparities is focused on improving the health status of vulnerable populations across the lifespan. It will assess the impact of all HHS policies and programs on health disparities, promote integrated approaches among HHS agencies, and drive the implementation of evidence-based programs and best practices.

Together, the HHS Strategic Action Plan and the *National Stakeholder Strategy* provide visible and accountable federal leadership while also promoting collaborations among communities, states, tribes, the private sector and other stakeholders to more effectively reduce health disparities.

HEALTH DISPARITIES

The existence of health disparities in the United States has been extensively documented beginning with the 1985 *Report of the Secretary's Task Force on Black and Minority Health*, and continuing on with more recent reports such as the 2002 report from the Institute of Medicine (IOM) (*Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*), and the yearly *National Healthcare Quality Report*s and *National Healthcare Disparities Reports* from the U.S. Agency for Healthcare Research and Quality (AHRQ). Earlier reports generally focused on disparities among racial and ethnic minorities and individuals of below average socioeconomic status (SES). However, a body of evidence continues to expand, which documents the existence of other health disparities by, for example, gender, literacy level, sexual orientation or gender identity, disability status, geography, and age. For example, rural and urban areas have significantly different health-related concerns, health risks, and healthcare resources. Individuals at different stages in life may be particularly vulnerable to risk factors for certain adverse health outcomes, which is demonstrated by the fact that adolescents and young adults are particularly at risk for injury deaths, suicide, and illicit drug use. The likelihood of adverse health outcomes for any of these various other populations is often greater when the individuals are from racial or ethnic minority populations.

The list is long for the diseases and related health concerns that are well documented as having significant disparities for certain populations. Examples include, but are not limited to, infant mortality, cardiovascular disease, cancer, HIV/AIDS, diabetes, chronic lower respiratory diseases, viral hepatitis, chronic liver disease and cirrhosis, kidney disease, injury deaths, violence, mental health disorders, and poor oral health.

The causes of health disparities—and the barriers to good health and health care—are multiple and overlapping. Many of the underlying risk factors that contribute to health disparities are the result of a host of interrelated elements that affect individuals across their lifespan, from birth to death. These factors, commonly called "determinants of health," influence the health and well being of individuals and communities for good or ill; together they interact to impact health. The determinants of health can be categorized under four broadly accepted categories:

- **Social determinants of health**—examples include gender, socioeconomic status, employment status, educational attainment, food security status, availability of housing and transportation, racism, and health system access and quality

- **Behavioral determinants of health**—examples include patterns of overweight and obesity; exercise norms; and use of illicit drugs, tobacco, or alcohol

- **Environmental determinants of health**—examples include lead exposure, asthma triggers, workplace safety factors, unsafe or polluted living conditions

- **Biological and genetic determinants of health**—examples include family history of heart disease and inherited conditions such as hemophilia and cystic fibrosis

The significance of the determinants of health has increasingly become a matter of discussion and research, along with the recognition that preventing disease and promoting health—rather than just treating disease once it appears—has tremendous potential for reducing health disparities and improving our nation's health. Placing the emphasis on prevention through, for example, the promotion and support of children and strong families, healthy lifestyles, and healthy working and living conditions has often been undervalued as a means of achieving and maintaining wellness. Efforts to eliminate health disparities must address determinants of health throughout an individual's lifetime. Health status should be of concern to policymakers in all sectors, not just health-related sectors—to develop policies and programs that tackle the fundamental causes of health inequity.

A HEALTH EQUITY STAKEHOLDER STRATEGY

The *National Stakeholder Strategy* development process was initiated and sponsored by OMH and consisted of a series of activities that engaged the wisdom of the multitude of individuals on the ground; in communities; in local, state and tribal organizations; in government agencies; and in places of education, business, and healthcare delivery—in short, the experts in efforts to reduce health disparities throughout the country.

Using a "bottom up" approach—thereby vesting those at the front line of fighting health disparities with the responsibility of identifying and helping to shape core actions for a coordinated national response to ending health disparities—the development process included the following:

Select comments from Regional Conversation participants

- "This Regional Conversation created a wonderful opportunity for each participant to have a voice."
- "I loved being a part of this creative process."
- "I was able to objectively look at our current programs and to be open to new ideas."
- "This experience reminded us all that there is most definitely a need for information sharing between organizations in order to end health care disparities."
- "It's critical to know who our partners are in our efforts to eliminate health disparities. Listening to perspectives from nontraditional partners is essential for applying new ideas."

- A **national summit** of nearly 2,000 leaders who were challenged to consider how best to collectively take action to effectively and efficiently reduce health disparities and advance health equity. OMH responded to the shared concerns of the Summit participants and formulated a draft version of the goals and principles of the NPA.

- A series of **"Regional Conversations"** with stakeholders in the ten HHS health regions in order to define, refine, and collaborate on a plan to eliminate health disparities through cooperative and strategic actions

- A variety of **focused stakeholder meetings** sponsored by OMH to analyze input that had been received—in order to finalize NPA and *National Stakeholder Strategy* goals, principles, and strategies

- An extended opportunity for **public review and incorporation of public input** into the NSS during which the draft version of the *National Stakeholder Strategy* was posted online and approximately 2,200 comments were received. OMH incorporated this input wherever possible.

- A **period of analysis, discussion and planning throughout all of the divisions within HHS**. The results of that dialogue are detailed in the HHS Action Plan to Reduce Racial and Ethnic Health Disparities, which will be reviewed annually to communicate ongoing actions.

Based on the process of community and stakeholder collaboration, the fundamental goals of the NPA and the *National Stakeholder Strategy* were ultimately defined as follows:

Goal 1: Awareness—*Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations.*

Goal 2: Leadership—*Strengthen and broaden leadership for addressing health disparities at all levels.*

Goal 3: Health System and Life Experience—*Improve health and healthcare outcomes for racial, ethnic, and underserved populations.*

Goal 4: Cultural and Linguistic Competency—*Improve cultural and linguistic competency and the diversity of the health-related workforce.*

Goal 5: Data, Research, and Evaluation—*Improve data availability and coordination, utilization, and diffusion of research and evaluation outcomes.*

Four crosscutting, fundamental principles are central to the goals of the *National Stakeholder Strategy*. First, change at the individual or community level is not sustainable without **community engagement** and leadership. Second, the creation of **partnerships** is critical in any action plan to eliminate disparities. The causes of health inequities are multiple and complex. Resources to solve such problems are valuable, finite, and must be strategically deployed. Partnerships allow the pooling of resources, mobilization of talents, and use of diverse approaches. Partnerships can limit duplication of efforts and fragmentation of services. Third, the culture with which an individual identifies informs how he or she understands the meaning of health and disease, and how that individual interacts with health providers or makes personal health or wellness decisions. The level of **cultural and linguistic competency** of healthcare providers and health educators has a powerful impact on the success or failure of any efforts to help individuals achieve optimum health. Finally, the requirement of **non-discrimination** for healthcare access and delivery is not only mandated by federal civil rights laws but also is a moral imperative and a practical necessity for achieving health equity. It must be present in our actions, services, leadership, and partnerships.

STRATEGIES FOR ACTION

The heart of the *National Stakeholder Strategy* resides in the 20 strategies for action to end health disparities that were developed by the collaborative process described above. The strategies reflect the voices and wisdom of a variety of communities, organizations, sectors, geographical locations, and missions (see table on the following page). Each of these strategies is linked to one of the five NPA goals. The *National Stakeholder Strategy* provides twenty summary charts, one for each strategy. Each chart has related lists of objectives, measures, and data sources. These comprise a menu of resources that change-oriented stakeholders can use in a very practical way to devise the specific actions that are compatible with their missions, their needs, their skills and resources, their constituencies, and their spheres of influence. The strategies can be used by any organization in any sector—public, private, and nonprofit—to design and prioritize policy and program changes at the local, state, tribal, regional, and national levels.

The goals and strategies in this plan offer a common reference, language, and starting point for those who wish to join in partnership with like-minded individuals and organizations to achieve health equity in the United States. A shared, nationally based game plan is especially important for the development of strong, strategic, collaborative partnerships of disparate organizations that decide to band together to combat health disparities. With the *National Stakeholder Strategy* in hand, they can begin discussions and planning for action with the same set of goals and potential strategies.

The overarching vision of the *National Stakeholder Strategy* is to promote systematic and systemic change that improves the overall health of the nation and its most vulnerable populations. It is the vision of the many stakeholders across the United States who built the plan and who stand ready to join in partnership to make their vision a reality.

ORGANIZATION OF THE NATIONAL STAKEHOLDER STRATEGY

This *National Stakeholder Strategy* provides background information and four content sections. The initial section describes the opportunities and challenges that influence efforts to achieve health equity; the Strategy's history, goals, and principles; its relationship to the NPA and the Action Plan to Reduce Racial and Ethnic Health Disparities; and the collaborative process that produced the strategies for action. The second section documents the evidence for the wide range of health and healthcare disparities in this country. This evidence provides context for the community and stakeholder-generated strategies that are offered in the third section. The final section provides an initial approach to operationalizing the *National Stakeholder Strategy.* Together these sections present a clarion call to action.

SUMMARY OF NPA GOALS AND STRATEGIES

Goal #	Goal Description	Strategies
1	**AWARENESS—** Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations	1. **Healthcare Agenda** Ensure that ending health disparities is a priority on local, state, tribal, regional, and federal healthcare agendas
		2. **Partnerships** Develop and support partnerships among public, nonprofit, and private entities to provide a comprehensive infrastructure to increase awareness, drive action, and ensure accountability in efforts to end health disparities and achieve health equity across the lifespan.
		3. **Media** Leverage local, regional, and national media outlets using traditional and new media approaches as well as information technology to reach a multi-tier audience—including racial and ethnic minority communities, youth, young adults, older persons, persons with disabilities, LGBT groups, and geographically-isolated individuals—to encourage action and accountability.
		4. **Communication** Create messages and use communication mechanisms tailored for specific audiences across their lifespan, and present varied views of the consequences of health disparities that will encourage individuals and organizations to act and to reinvest in public health.
2	**LEADERSHIP—** Strengthen and broaden leadership for addressing health disparities at all levels	5. **Capacity Building** Build capacity at all levels of decision-making to promote community solutions for ending health disparities.
		6. **Funding Priorities** Improve coordination, collaboration, and opportunities for soliciting community input on funding priorities and involvement in research and services.
		7. **Youth** Invest in young people to prepare them to be future leaders and practitioners by actively engaging and including them in the planning and execution of health, wellness, and safety initiatives.
3	**HEALTH SYSTEM AND LIFE EXPERIENCE—** Improve health and healthcare outcomes for racial, ethnic, and underserved populations	8. **Access to Care** Ensure access to quality health care for all.
		9. **Children** Ensure the provision of needed services (e.g., mental, oral, vision, hearing, and physical health; nutrition; and those related to the social and physical environments) for at-risk children, including children in out-of-home care.
		10. **Older Adults** Enable the provision of needed services and programs to foster healthy aging
		11. **Health Communication** Enhance and improve health service experience through improved health literacy, communications, and interactions.
		12. **Education** Substantially increase, with a goal of 100%, high school graduation rates by working with schools, early childhood programs, community organizations, public health agencies, health plan providers, and businesses to promote the connection between educational attainment and long-term health benefits.
		13. **Social and Economic Conditions** Support and implement policies that create the social, environmental, and economic conditions required to realize healthy outcomes.
4	**CULTURAL AND LINGUISTIC COMPETENCY—** Improve cultural and linguistic competency and the diversity of the health-related workforce	14. **Workforce** Develop and support the health workforce and related industry workforces to promote the availability of cultural and linguistic competency training that is sensitive to the cultural and language variations of diverse communities.
		15. **Diversity** Increase diversity and competency of the health workforce and related industry workforces through recruitment, retention, and training of racially, ethnically, and culturally diverse individuals and through leadership action by healthcare organizations and systems.
		16. **Ethics and Standards, and Financing for Interpreting and Translation Services** Encourage interpreters, translators, and bilingual staff providing services in languages other than English to follow codes of ethics and standards of practice for interpreting and translation. Encourage financing and reimbursement for health interpreting services.
5	**DATA, RESEARCH, AND EVALUATION—** Improve data availability, coordination, utilization, and diffusion of research and evaluation outcomes	17. **Data** Ensure the availability of health data on all racial, ethnic, and underserved populations.
		18. **Community-Based Research and Action, and Community-Originated Intervention Strategies** Invest in community-based participatory research and evaluation of community-originated intervention strategies in order to build capacity at the local level for ending health disparities.
		19. **Coordination of Research** Support and improve coordination of research that enhances understanding about, and proposes methodology for, ending health and healthcare disparities.
		20. **Knowledge Transfer** Expand and enhance transfer of knowledge generated by research and evaluation for decision-making about policies, programs, and grant-making related to health disparities and health equity.

Section 1: Development of The National Stakeholder Strategy

Development of The *National Stakeholder Strategy*

Changing health outcomes for many of the United States' racial and ethnic minorities, the poor, and other underserved populations is a critical need. Health and healthcare disparities are persistent and pervasive; they are harmful not only to the individuals and communities that experience them, but to the nation as a whole. Everyone benefits when health and healthcare disparities are eliminated and health equity becomes a reality: financial costs are greatly diminished; healthy children can grow into productive adults; healthy adults boost workforce capacity and capability; and values of social compassion are honored.

THE CONTEXT FOR THE *NATIONAL STAKEHOLDER STRATEGY*

In this effort to achieve health equity, the United States aligns itself with similar endeavors throughout the world. There has been significant global attention placed on the risk factors for adverse health outcomes — factors that may long predate the appearance of disease. Such factors are those that relate to social constructs rather than medical constructs and are fundamentally and particularly toxic to health. Well-known factors include low socioeconomic status, low educational status, and inadequate access to (or utilization of) quality health care. There are other adverse determinants of health as well. Examples include residence in geographic areas that have poor environmental conditions (e.g., violence, poor air quality, and inadequate access to healthy foods), racism, inadequate personal support systems, limited literacy, and limited English proficiency (LEP). These determinants are often associated with racial and ethnic minority and underserved communities, and are among the determinants of health.

Margaret Chan, Director-General of the World Health Organization (WHO), drew attention to the urgent worldwide problem of health inequities and its profound consequences when she said, "Health inequity really is a matter of life and death."[1] The significance of social determinants of health has increasingly become a matter of discussion and research, along with the recognition that, although social factors are at the root of many of the inequities in health and health care worldwide, they are not necessarily inevitable and are amenable to intervention.[2] In 2005, WHO formed an independent Commission on Social Determinants of Health (CSDH)[3] to make the case that health status is of concern to policymakers in all sectors (not just health) and to "link knowledge with action" regarding how these factors operate and how they can be changed to improve health and reduce health inequities.

> "Health inequity really is a matter of life and death."
>
> – Margaret Chan, MD, MPH
>
> Director-General, World Health Organization, 2008

The 2008 report of the CSDH,[3] "Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health," notes the powerful link between social factors and health. The report emphasizes that social and economic policies directly impact the health and well-being of those who live and work under them. The report further suggests that interventions and policies to achieve health equity must be based on evidence and result in action, and they must address daily living conditions and issues related to power, money, and resources.

WHO defines the *social determinants of health* as the "conditions in which people are born, grow, live, work, and age, including the health system. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels, which are in and of themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities."[4] Operatively, health inequities often play out as differences in opportunities for healthy lifestyles, differences in quality of care within the healthcare system, and differences in access to the healthcare system (both preventive and curative care).[5]

In the United States, there are examples of health and healthcare disparities by race, ethnicity, gender, literacy level, socioeconomic status, geographic location, disability status, and sexual orientation or gender identity. Examples include disparities in cardiovascular disease, diabetes, HIV/AIDS, infant mortality, oral health, mental health, and health care quality and access.

"It is time to refocus, reinforce, and repeat the message that health disparities exist and that health equity benefits everyone."

– Kathleen G. Sebelius, Secretary, HHS

Acknowledging that persistent health disparities are the manifestation and interplay of complex factors is critical to solving these problems. It is only as we develop a fuller understanding of the scope and magnitude of factors affecting health outcomes and evidence for what works to reduce disparities that the most effective advancement of appropriate policy and intervention strategies can occur. This will require the combined efforts of governments, academia, institutions, businesses, humanitarian and faith-based organizations, and individuals working across the entire spectrum of public, private, community, and individual enterprise.

Beyond the heavy burden that health and healthcare disparities represent for the individuals affected, there are additional social and financial burdens borne by the country as a whole. These burdens constitute both ethical and practical mandates to reduce health and healthcare disparities and achieve health equity.

DEFINITIONS

The terms — *health inequality, health disparity, healthcare disparity, health equity,* and *health inequity* — are widely used, often without clarification of meaning. Therefore, in an effort to distinguish between these terms, in this *National Stakeholder Strategy:*

- *Health inequality* is the "difference in health status or in the distribution of health determinants between different population groups."[6]

- *Health disparity* a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial and/or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.[7]

- *Healthcare disparity* relates to "differences in the quality of health care that are not due to access-related factors or clinical needs, preferences, and appropriateness of interventions. These differences would include the role of bias, discrimination, and stereotyping at the individual (provider and patient), institutional, and health-system levels."[8]

- *Health equity* is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and healthcare disparities.[9]

HISTORICAL BRIEF: WHAT THE PAST HAS TAUGHT US

The 1985 *Report of the Secretary's Task Force on Black and Minority Health (Heckler Report)* was the initial federal effort to identify and draw national attention to the tragedy of minority health disparities.[10] The report, issued by then-HHS Secretary Margaret Heckler, formally detailed for the American consciousness the existence and extent of racial and ethnic health disparities for Blacks and three other identified minority groups (defined during that time as Hispanics, Asians/Pacific Islanders, and Native Americans). With the exception of information on African Americans, there was limited data available in 1985 about the health and well-being of racial and ethnic minority populations.

Nevertheless, the *Heckler Report* concluded that similar patterns of health disparities existed for all the identified minority groups and called out six areas of particular concern: cancer, cardiovascular

disease/stroke, diabetes, infant mortality, chemical dependency, and homicide. Between 1979 and 1981, these six conditions together accounted for more than 80 percent of deaths in excess of that of the White population for African Americans and the other identified minority populations.

In his letter introducing the report, Task Force Chairman Thomas E. Malone (then Director of the National Institutes of Health [NIH]) expressed the hope that the report should serve "not only as a standard resource for department-wide strategy, but as the generating force for an accelerated national assault on the persistent health disparities … " In fact, the report did generate a plethora of public and private programs, entities, and initiatives aimed at reducing the disparity gap, including the immediate formation of the federal Office of Minority Health (OMH). However, while there have been dramatic improvements to both the healthcare delivery system and health outcomes (e.g., mortality and morbidity rates) for all populations in the United States since 1985,[11,12,13] many of the findings and recommendations of the *Heckler Report* are still pertinent. Health disparities still exist and are still serious.[8,13]

The evidence of persistent and pervasive health and healthcare disparities is clearly articulated in the 2002 landmark report of the Institute of Medicine (IOM), *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (Unequal Treatment Report)*.[8] Upon the release of the report, the IOM committee chair noted, "The real challenge lies not in debating whether disparities exist, but in developing and implementing strategies to reduce and eliminate them."[8] The *Unequal Treatment Report* identified multiple contributing factors, including the organization and operation of healthcare systems, the attitudes and behavior of patients, and the biases of healthcare providers. The recommendations in the *Heckler Report* are mirrored and complemented by the *Unequal Treatment Report* and are just as pertinent today.

> "The real challenge lies not in debating whether disparities exist, but in developing and implementing strategies to reduce and eliminate them."
>
> – Alan R. Nelson, Chair, IOM Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care

Recommendations in the *Unequal Treatment Report* included avoiding fragmentation of health plans along socioeconomic lines; collecting and reporting data on healthcare access and utilization by patient race, ethnicity, socioeconomic status, and primary language; conducting further research to identify sources of racial and ethnic disparities; assessing promising intervention strategies; and implementing patient education programs to increase patients' knowledge of how to best access care and participate in treatment decisions. The report also provided important insights into the progress of setting and meeting local, state, tribal, regional, and national health disparities goals, and on effectively measuring and enhancing our collective knowledge of health and healthcare disparities.

A quarter of a century ago, the Secretary's Task Force acknowledged that "the factors responsible for health disparities are complex and defy simplistic solutions."[10] This analysis is just as fresh today for those who conduct health disparities research and/or implement it in practice, and who struggle to identify and combat the medical, social, economic, and other factors that lead to adverse health outcomes. New approaches and new partnerships are needed immediately to close the health gap for racial, ethnic, and underserved communities, and the nation.

CURRENT AND FUTURE REALITIES THAT IMPACT HEALTH DISPARITIES

The previous passage provides a historical frame of reference for considering the new approaches and partnerships that are the hallmark of the *National Stakeholder Strategy* for Achieving Health Equity. In this piece, we provide an overview of current realities that will significantly impact efforts to reduce health and healthcare disparities in the United States, and are the context in which the *National Stakeholder Strategy* will be operationalized and evaluated. These realities provide both challenges and opportunities for devising new methods of attacking the persistent problem of health and healthcare disparities in the United States.

Emphasis on Prevention and the Social Determinants of Health

The importance of preventing disease and promoting health — rather than just treating disease once it appears — has tremendous potential for reducing health disparities and improving our nation's health.[14,15] An emphasis on treatment after the fact instead of aggressively, widely, and prominently promoting health and prevention strategies undermines well-being and quality of life, and results in major adverse social and economic impacts.[15] Placing the emphasis on primary prevention through the promotion and support of children and strong families, healthy lifestyles, and healthy working/living conditions has often been undervalued as a means of achieving and maintaining wellness. A strong prevention strategy must ensure that children have stable homes, regular dental and medical checkups, physical activity and healthy foods at school, and safe living environments. It also must address adults' behaviors related to, for example, smoking, eating, and exercise. Removing disadvantages early on may be a powerful preventive measure in decreasing health disparities. The cumulative effect of chronic exposure to harmful factors throughout the life course increases the risk for poor health in adulthood.[16] This social determinant framework expands the concept and practice of health prevention beyond the traditional medical model. Thus, eliminating health disparities will necessitate behavioral, environmental, and social-level approaches to address issues such as inadequate housing, violence, and limited opportunities to earn a livable wage.[17]

Growing Racial and Ethnic Minority Populations

Minority populations now comprise 34 percent of the total U.S. population, are increasing in number faster than the White population, and are expected to represent 40 percent of the population by the year 2030. The District of Columbia and four states (Hawaii, New Mexico, California, and Texas) are now "majority-minority" states, meaning that more than 50 percent of their population is made up of people other than single-race, non-Hispanic Whites.[18] Addressing the health needs of our minority populations has always been an ethical mandate. As the aggregate of our various minority populations moves toward becoming a majority of the country's populace, health equity becomes even more critical. If health inequities are not adequately addressed, everyone suffers — through shared loss of economic capital, loss of human intellectual and leadership capital, and social instability.

> "We need to do all we can to close this gap and empower our communities to meet and master their health challenges in ways that acknowledge and celebrate our diverse American cultures."
>
> – Senator Edward M. Kennedy
>
> Message to Participants, Third National Leadership Summit on Eliminating Racial and Ethnic Disparities
>
> February 25, 2009

Broader Minority Health Constituency

Over the last several decades, a large number of minority health-related programs, organizations, advocacies, and initiatives have come into existence at all levels of society — local, state, tribal, regional, national, faith-based, public, private, academic, and business.[19] This sizeable and talented workforce is a significant and sometimes inadequately tapped resource for advancing health equity. Growth of the minority health constituency has also led to parallel growth in the health disparities knowledge base as evidence-based research, practical experience, and best-practice inquiries continue to be important avenues for finding solutions. The diversity of our communities and their languages has also fostered a greater emphasis on recruiting culturally and linguistically competent healthcare providers into the workforce.

Increasing Access for Persons with Disabilities

There are more than 54 million individuals (19 percent of the population) in the United States who experience some level of disability.[20] They became protected against discrimination on the basis of disability through the 1990 Americans with Disabilities Act and its later amendments.[21] A key target for reducing health disparities for disabled Americans is to increase accessibility across a broad spectrum of needs. Healthcare access in this context has the particular meaning of enabling disabled persons to access

the functionality, benefits, services, and information provided by healthcare systems to the same extent as those without disabilities. Such access includes the use and development of various assistive technologies. The Surgeon General's Call to Action to Improve the Health and Wellness of Persons with Disabilities[22] encourages healthcare providers to treat the whole person; educators to teach about disability; the public to see an individual's abilities; and communities to ensure accessible health care and wellness services for persons with disabilities.

Growing Awareness of Conditions Impacting Rural Health

In 2009, approximately 17 percent of the U.S. population (50 million individuals) resided in rural (nonmetropolitan) areas.[23] These areas extend throughout 80 percent of the U.S. land area. Since 2001, poverty has been higher in nonmetropolitan areas compared to the rest of the country: 15.4 percent versus 12.5 percent, respectively, in 2007.[24] Poverty is persistent and widespread for rural children.[24] Rural residents face a number of barriers in accessing quality health services, and they experience significant health disparities. Compared to their urban counterparts, rural residents were more likely to report poor-to-fair health; live with a chronic disease such as diabetes; die from heart disease; be admitted for uncontrolled diabetes; and they are less likely to report a dental visit within the past year.[25] Additionally, rural women have lower rates of breast cancer screenings.[26] Minorities living in rural communities are particularly disadvantaged.[25]

Challenges to Urban Health

Urban centers and metropolitan areas have their own set of sociological and environmental factors that can adversely affect health. In the midst of the wealth, commerce, and privilege that exist in most U.S. cities, there is also residential segregation, concentrated poverty, higher levels of poor indoor and outdoor pollution (e.g., noise and air pollution from motor vehicle traffic and industry; indoor exposure to allergens, carcinogens, and lead), and overcrowding (with higher rates of infectious diseases).[27,28,29,30] These factors, and the cumulative effects of social disadvantage, are significant for racial and ethnic minority and underserved populations that are often overrepresented in high-density areas. There is an uneven distribution of socioeconomic status at the neighborhood level in urban areas. An individual's status and place of residence is a social determinant of health across the lifespan.[31,32] The majority of the world's future population will reside in urban areas; seven out of 10 people will be city dwellers by 2050.[33] Urban population growth places a substantial infrastructure and safety burden on governments to provide for public safety and emergency preparedness, safe water and sanitation, solid waste disposal, and adequate education and housing options.

Increasing Knowledge of Health Concerns for LGBT Populations

Persons who identify as lesbian, gay, bisexual, and transgender (LGBT) have specific healthcare needs and face unique barriers in access to quality care.[34,35,36] Examples of barriers include reluctance to disclose sexual or gender identity when receiving medical care to avoid maltreatment and discrimination; lack of provider knowledge of risk factors; insurance policies that limit coverage for domestic partners; and lack of culturally appropriate prevention strategies and services. LGBT persons who also belong to other historically disadvantaged and other vulnerable populations experience compounded obstacles to care and wellness.

Expectations for Improved Data Collection, Reporting, and Diffusion

In the last decade, a greater awareness has developed regarding the importance of collecting reliable data on specific racial and ethnic subpopulations beyond long-standing categories of race and ethnicity.[37] Combining minority subgroups into generalized racial or ethnic categories for data collection can mask dramatic variability in outcomes and thereby inhibit the design of effective, targeted interventions. For example, health outcomes vary dramatically for the populations of the U.S. territories, including the residents of Puerto Rico (who are often placed in the general category of "Hispanics/Latinos"), the residents of the U.S. Virgin Islands (who are often placed in the general category of "African Americans"), and the residents of Guam, American Samoa and the Northern Mariana Islands (who are often placed in the general category of "Pacific Islanders"). Improvements in data collection and reporting hold potential for supporting evidence-based research to identify and solve health inequities.[13,38,39,40,41]

Major Advances in Technology

The increase of computing power and the development of the Internet and other advanced communication and information technologies have led to the enhanced capability to collect, analyze, store, and access massive amounts of data (e.g., products of the U.S. Census Bureau, Agency for Healthcare Research and Quality [AHRQ], Centers for Disease Control and Prevention [CDC], and expanded use of health information technology [HIT]). It has become increasingly necessary for policymakers and healthcare providers to search for efficient and effective means by which to deploy HIT to better manage personal and public health. In 2009, HHS began implementation of the Health Information Technology for Economic and Clinical Health Act (P.L. 111-5), which provides for a national HIT structure that will improve care coordination, enable more effective communication between healthcare providers and patients, and enable an efficient means for healthcare providers and departments of public health to more effectively monitor and analyze public health data. Just as important, the Act is creating programs that include national electronic health record adoption among healthcare providers, workforce training for HIT personnel, and the deployment of health information exchanges.

THE *NATIONAL STAKEHOLDER STRATEGY*: A NEW OPPORTUNITY

An impetus for establishing the *National Partnership for Action (NPA)* as a national movement grew in response to the voices of the nearly 2,000 leaders who attended the National Leadership Summit for Eliminating Racial and Ethnic Disparities in Health sponsored by OMH.[42] The summit broadened the national dialogue about health disparities from the more traditional disease-focused approach to a more systems-oriented approach that addresses crosscutting, multilevel issues. This broader approach can systematically tackle health disparities by bringing individuals and organizations within the health sector together with other individuals and organizations whose work influences health. This approach is in keeping with the mission of OMH to improve and protect the health of racial and ethnic minority populations in the United States through the development of health policies and programs that will eliminate health disparities. It also is aligned with the *Healthy People 2020* objectives to achieve health equity, eliminate disparities, and improve the health of all groups.[43]

In response to the summit, a clear mandate emerged around actions necessary to more effectively and efficiently address health disparities in this country. The views of summit participants were consistent with several recommendations of the *Heckler Report, the Unequal Treatment Report*, key findings in the *National Healthcare Disparities Report (NHDR)* and *National Healthcare Quality Report (NHQR)*, and findings from recent literature on health disparities. The summit honored the 20-year mark since the release of the *Heckler Report* and the remarkable growth since 1985 in health disparities knowledge, activities, and funding. In addition, the summit ushered in a new opportunity to coalesce around a national strategy to end health disparities.

Following the 2006 summit, OMH responded to the common concerns and comments of summit participants in order to begin to formulate NPA goals and principles. The original concept was that partnerships were the unique foundation on which to build the NPA. Refinements and additions to NPA goals and principles and to the *National Stakeholder Strategy* were ongoing via the process described below and were dependent on community and stakeholder input at every stage. The final versions of the NPA goals and principles are presented in detail later in this section.

Relationship Between the *National Partnership for Action* and the *National Stakeholder Strategy*

A prime activity of the NPA was to establish the priorities for a national strategy using a "bottom up" approach. The intent was to change the paradigm of strategy development by vesting individuals — particularly those at the front line of fighting health disparities — with identifying and helping to shape core actions for a coordinated national response.

The "bottom up" approach included focused, localized continuations of the National Leadership Summit on Eliminating Racial and Ethnic Disparities in Health. Details of this process are provided later in this section.

Thus, the natural outcome of the NPA was the development of the *National Stakeholder Strategy* and its two other components: Blueprints for Action (which are being aligned with the *National Stakeholder Strategy* and focus on specific sectors), and targeted initiatives that are being undertaken by partners across the public and private sectors in support of the NPA. These other two components develop subsequent to the launch of the *National Stakeholder Strategy*.

Guiding Principles of the NPA and *National Stakeholder Strategy*

> "We may have all come on different ships, but we're in the same boat now."
>
> – Dr. Martin Luther King Jr.

Four fundamental principles have helped to guide the process by which input from community and other stakeholders was solicited, analyzed, and reviewed. These principles informed the development of the *National Stakeholder Strategy* and include: the importance of community engagement, the value of working via partnerships, the necessity of cultural and linguistic competency to meet the needs of all communities, and the requirement of non-discrimination in actions, services, leadership, and partnerships.

Community Engagement

Communities are made up of diverse individuals, institutions, networks, and organizations in the private and public sectors that may share a physical space (communities of geography) or a history and sense of connection due to a common experience (communities of identity).[44] We experience community where we live, work, learn, play, age, and many other facets of life. Each community has its own unique characteristics that must be considered when engaging their leaders, institutions, and members.

A national effort to end health disparities could not be successful without the input, support, and actions of communities across localities, states, tribes, and regions of the country. Communities experience the

consequences of disparities firsthand and understand the solutions needed to improve the conditions that contribute to them. The input of community leaders and members is critical to ensure the solutions to end health disparities are aligned with their community's history, norms, and needs. Leaders and traditional institutions of racial, ethnic, and underserved groups have been a long-overlooked resource for developing solutions for their communities.

When engaged appropriately, communities across the nation have successfully mobilized to fight violence, drug and alcohol abuse, HIV/AIDS, racism, and other problems. Social and medical research over the past 150 years has shown that five factors have the most far-reaching and powerful effect on the ability of communities to mobilize and develop solutions that best fit their values and needs.[45] These factors include:

- A sense of community, which forms when community members believe they have influence, can have their needs met, share similar values, experience feelings of mutual trust and caring, and share an emotional connection
- A community's connections to other communities, networks, and larger and more resourceful institutions that can provide access to opportunities and resources
- Community members' ability to exercise individual and collective control, which can in turn foster a sense of hope for improving the conditions that affect their lives
- Collective action through vehicles such as neighborhood associations, advocacy groups, youth organizing efforts, and other organized entities
- Adequate economic, financial, and other resources that allow individuals, families, and communities to access the opportunities they need to succeed and improve their living conditions and ultimately, their health.

Partnerships

Partnerships are a vehicle through which communities can mobilize and take action to end health disparities. When actual community involvement exists, partnerships can address community health concerns while aiding and developing capacity in those communities. Thus, partnerships are vehicles to increase community participation, leadership skills, resources, social and inter-organizational networks, sense of community, community power, and community problem solving.[46]

"It's critical to know who our partners are in our efforts to eliminate health disparities. Listening to perspectives from nontraditional partners is essential for applying new ideas."

– NPA Regional Meeting Participant

Thousands of partnerships, anchored by government or community organizations, have formed over the past two decades to support health-related activities. Health partnerships are collaborations in which organizations agree to work together to achieve shared or complementary goals that lead to improvements in health, safety, or well-being.[47] A partnership is action-oriented and focuses on reducing or preventing community problems by analyzing the problem, identifying and implementing solutions, and creating social change. [47]

The best of these partnerships bring people together, expand resources, focus on issues of community concern, and achieve better results than any single group could achieve alone. Partnerships offer many direct and indirect benefits[48] such as:

- Serving as effective and efficient vehicles for exchanging knowledge and ideas
- Demonstrating and developing community support or concern for issues
- Maximizing the power of individuals and groups through collective action
- Improving trust and communication among community agencies and sectors
- Mobilizing diverse talents, resources, and strategies
- Building strength and cohesiveness by connecting individuals and organizations
- Reducing the social acceptability of health-risk behaviors
- Changing community norms and standards

The pooling of resources, mobilization of talents, and use of diverse approaches that typify effective partnerships make them a logical cornerstone in any effort to end health disparities. Inequities in health have multiple causes and consequences that require complex solutions and actions from multiple disciplines and sectors (e.g., social services, health, housing, education, and law enforcement, among others). However, health and human service organizations often are limited in addressing such issues due to duplication of efforts, fragmentation of services, multicultural insensitivity, and unequal access to resources.

Through the sharing of human and material resources, finances, and time, partnerships provide a multifaceted approach to any issue. Such partnerships may even counter the declining trend in civic engagement and re-engage individuals and organizations to address local problems.[49] In fact, partnerships are appealing because they mirror the very principles of democracy that encourage their formation — principles such as civic participation, equality, tolerance, human rights, accountability, and transparency.[50] In short, local, state, tribal, regional, and national organizations must work collaboratively with the individuals, families, and communities that are affected by health disparities if these organizations hope to effect change.

Cultural and Linguistic Competency

Improving cultural and linguistic competency is necessary for achieving better health outcomes for racial and ethnic minorities and underserved populations. *Cultural competency* supports the view that health values, beliefs, practices, and behaviors are culturally bound.[51] Understanding how culture and health intersect fosters improved health outcomes. Many of the challenges encountered when integrating cultural competence into health care come from insufficient understanding of the role of culture in defining health.

Culture can be defined as a "set of shared attitudes, values, goals, and practices."[52] Culture influences a group's ways of thinking, feeling, and acting. Culture informs how a group perceives health, wellness, disease, health care, and prevention. As a concept, a definition, and a set of values, *cultural competency* was originally defined as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations."[53] Since then, service and support agencies and systems have adapted the definition to address their own vision, mission, and values.

Linguistic competency is less debated and more clearly understood by healthcare system administrators and providers. However, in practice, the focus has been more narrow than delineated by its definition, which is "the capacity of an organization and its personnel to communicate effectively and to convey information in a manner easily understood by diverse audiences, including persons of limited English proficiency (LEP), those who have low literacy skills or are not literate, and individuals with disabilities."[54] Most organizations recognize the need to provide translated materials and interpreters to LEP individuals and to individuals with disabilities. Rarely do organizations recognize the relationship of literacy to health literacy. Providing materials for individuals who have low literacy skills is also part of the framework for providing linguistically competent services.

Ensuring that LEP individuals receive services is based on federal law. Title VI of the Civil Rights Act of 1964 and its implementing regulations prohibit conduct that has a disproportionate adverse effect on LEP persons due to their race, color, or national origin. Thus policies and practices that adversely affect people with limited English proficiency may constitute national origin discrimination. The failure of recipients of federal financial assistance (often healthcare system administrators and providers) to take reasonable steps to provide LEP persons with a meaningful opportunity to participate in federally funded programs may constitute a violation of Title VI.[55]

Nondiscrimination

Virtually all hospitals — and most healthcare providers — are subject to federal civil rights laws.[55, 56, 57] These laws prohibit discrimination and ensure that federal funds are not used to support programs or activities that discriminate on the basis of race, color, national origin, disability, or age. For example, HHS implementing regulations for Title VI require that healthcare providers receiving federal funds (including Medicare, Medicaid, Children's Health Insurance Program [CHIP], grants from CDC, NIH, or any other HHS agency) may not engage in any of the following activities based on race, color, or national origin:

- Deny services, financial aid, or other benefits provided as a part of health or human service programs
- Provide a different service, financial aid, or other benefit, or provide them in a different manner from those provided to others under the program
- Segregate or separately treat individuals in any matter related to the receipt of any service, financial aid, or other benefit

In any of a number of their roles — e.g., as members of quality improvement teams, clinician-educators, community and patient advocates, or hospital board members — health and healthcare workers must be sensitive to any potential for civil rights violations. It is critical to be aware of and report concerns about compliance with federal civil rights laws. Everyone should have a commitment to report violations of the law, to protect the vulnerable, and to support access to quality health care for all people. In doing so, we can eliminate discrimination as a cause of health and healthcare disparities.

It is widely accepted that discrimination, racism, and bias directly and indirectly contribute to negative health outcomes and to health disparities.[58-63, 59, 66] The mechanism or magnitude of the connection between racism and health disparities has not yet been fully clarified.[59,60,61,63] Nevertheless, numerous studies associate real or perceived experiences of racism with increased risk for physical and psychological diseases.[59,60,63] For example, there may be associations with increased rates of hypertension, respiratory problems, chronic conditions, and poorer perceived physical health.[59,61,63,64,65] Acute or long-term exposure to racism may manifest as a stress response, which triggers harmful physiological and psychological pathways, as do other stress-causing experiences.[63]

"Of all the forms of injustice, inequality in health care is the most shocking and inhumane."

– Dr. Martin Luther King, Jr.

Many of the limitations on research that seek to establish and define the link between racism and poor health outcomes relate to the difficulties of measuring racism, ethnicity, and lifespan socioeconomic inequalities.[59, 63] The reality of inadequate data and gaps in knowledge on this subject highlight the need for solid, evidence-based studies on the connection between racism and health disparities — with the objective to determine how long-term exposure to bias affects health.

Racism can be categorized as follows:[60, 62]

- Institutionalized — "differential access to the goods, services, and opportunities of society by race"
- Personally-mediated — "prejudice and discrimination by individuals toward others"
- Internalized — "acceptance by members of the stigmatized races of negative messages about their own abilities and intrinsic worth"

The social movements of the 20th century resulted in significant reductions in discrimination and racism — and in major reductions in early death and the spread of disease. These changes were often interrelated. For example, systemic institutional changes such as the establishment of child labor laws; improved working and housing conditions; the civil rights movement; increased access to care for minorities; and anti-discrimination laws all indirectly or directly led to positive health outcomes, especially for those who had been marginalized in society.[67]

A pertinent illustration is the lack of trust in the medical establishment.[68, 69, 70] It is generally held that this phenomenon reflects an intergenerational awareness of past incidences of medical abuse and mistreatment of minority patients. Examples include segregated medical care; the abuses of the Tuskegee syphilis study of African American men conducted by the Public Health Service; questionable radiation studies among Alaskan Natives in the 1950s; coerced, unwitting, or underage sterilization among American Indian women in the 1960s and 1970s; high rates of sterilization of Hispanic women in New York City, California, and the Southwest; and use of Puerto Rican women during the 1950s as research subjects in early clinical trials of birth control pills.[71-79]

Public policies and personal patterns of behavior that were common in the past may still be reflected in some of our society's old operating patterns, laws, assumptions, and behaviors. For example, existing patterns of housing; location and quality of neighborhoods; bias in medical care access and delivery; the stress of real and perceived racism; and intergenerational internalization of stigma are all social determinants that contribute to health disparities.[63]

Achieving health equity requires cooperative, coordinated, and multifaceted solutions to improving determinants of health that affect various populations.[80] As described below, the mission and goals of the NPA and *National Stakeholder Strategy* aim to identify, support, and replicate such solutions.

Mission and Goals of the NPA and *National Stakeholder Strategy*

The mission of the NPA is to increase the effectiveness of programs that target the elimination of health disparities through the coordination of partners, leaders, and stakeholders committed to action. The *National Stakeholder Strategy*, one of three components of the NPA, was developed through a sequence of activities involving the collaboration of stakeholders from across the country. It was clear by the end of the sequence of activities used to develop the *National Stakeholder Strategy* that the following five goals were imperative:

Goal 1: Awareness — *Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations.*

Goal 2: Leadership — *Strengthen and broaden leadership for addressing health disparities at all levels.*

Goal 3: Health System and Life Experience — *Improve health and healthcare outcomes for racial, ethnic, and underserved populations.*

Goal 4: Cultural and Linguistic Competency — *Improve cultural and linguistic competency and the diversity of the health-related workforce.*

Goal 5: Data, Research, and Evaluation — *Improve data availability and coordination, utilization, and diffusion of research and evaluation outcomes.*

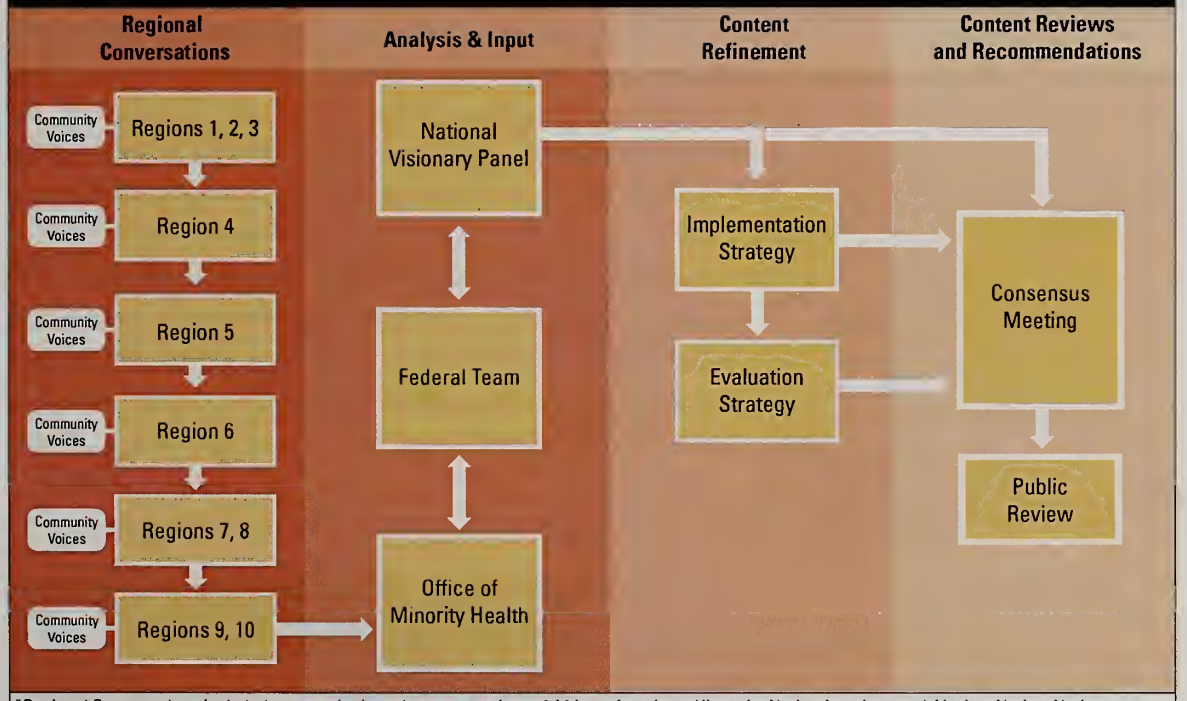
A detailed description of each goal, and the 20 strategies that support the five goals, is provided in Section 3 of this document.

PROCESS FOR DEVELOPING THE *NATIONAL STAKEHOLDER STRATEGY*

Community and Other Stakeholder Input

The process for developing the *National Stakeholder Strategy* was deliberate and began by obtaining the views of community leaders and other stakeholders. As outlined in Exhibit 1-1, the approach began with "Community Voices" meetings and "Regional Conversations" across the United States; continued on with analysis, input, and content refinement from community and additional stakeholders, experts, and representatives of federal agencies; was followed by an extended public review period and incorporation of public input into the *National Stakeholder Strategy*, and concluded with the finalization and dissemination of this document. This approach ensured that wide-ranging communities of stakeholders and diverse voices were heard and considered.

Exhibit 1-1: *National Stakeholder Strategy* for Action Development Process



*Regional Conversations included community-based representatives of African-American, Hispanic, Native American and Alaskan Native, Native Hawaiian and Pacific Islander, and Asian-American attendees at the Regional Conversations. In specific Regional Conversations, representatives from tribal, Caribbean, Pacific Islands, and academia also held meetings and/or provided input to the Regional Conversation outcomes. The Federal Team refers to the FIHET(Federal Interagency Health Equity Team).

Community Voices Meetings

The purpose of the Community Voices meetings was to draw on the expertise of individuals representing different populations to help inform the broader Regional Conversations (see below). It was important to bring together smaller groups that represented different communities to identify priorities and common issues. Participants were individuals representing specific constituencies including local communities, faith-based organizations, tribes, and geographic areas (e.g., U.S. island areas). In addition, participants also included representatives from state offices of minority health that were aligned with community missions to achieve health equity; and from universities and colleges that considered themselves supporters and data/information sources for their local communities.

> "If we as a nation are to learn about creating an effective healthcare system for everybody, it is essential to hear the voices of everybody."
>
> – Community Voices Meeting Participant

During the Community Voices meetings, participants emphasized that community involvement is necessary in creating innovative solutions to improve health outcomes. They also reported awareness of partnerships — among some academic institutions, health providers, and communities — which have played a critical role in promoting programs and solutions to address health disparities (specifically chronic disease disparities).

Regional Conversations

The Regional Conversations were designed to identify community-level priorities and develop community-inspired solutions. Six separate meetings were held in different parts of the country that included the 10 HHS regional areas (see Section 2 for a listing of HHS regional areas).

Invitations were extended to participants based upon extensive consultations with various sources including state public health and minority health officials; regional health administrators and minority health consultants; organizations representing different constituencies; and OMH partner organizations and grantees. Individuals were selected from one of six categories — community; tribal government (based on region) and tribal organizations; state government; health and healthcare systems; academic and research sectors; and the private sector (e.g., business community, employers, local and community foundations, etc.). To ensure diversity and generate community-oriented solutions, at least 40 percent of attendees were community leaders drawn from faith-based organizations, neighborhood coalitions, community-based organizations, and local government. Collectively, these conversations elicited input and fostered cooperation among a wide variety of stakeholders.

> "This Regional Conversation created a wonderful opportunity for each participant to have a voice."
>
> – Regional Meeting Participant

Insights and information derived from the Community Voices meetings were used as a springboard for discussion during the ensuing Regional Conversation. Each regional meeting included facilitated breakout sessions and also served as a venue for learning and open dialogue, collaborative conversations, and sharing of new ideas and insights. Participants were challenged to become a catalyst for change in their circles of influence.

Prior to each Regional Conversation, participants were asked to review several documents including profiles of health disparity initiatives and specific programs occurring in their region. They also reviewed fact sheets on health disparities and information on the importance of regional planning, building effective partnerships, and developing intrastate and interstate collaborations. Participants also were asked to consider questions such as the following before the meeting:

- What are the most pressing health disparities in your state or region? Which of these can you focus on collaboratively as a region?
- Are there any successful model programs or promising practices in your state that could work on a regional level?
- To eliminate health disparities in your region, what data or research would be useful in helping to develop a strategic action plan?
- How can you be more effective in sharing information on successes and barriers to eliminating health disparities in your region?

- What existing partnerships are successfully addressing health disparities in your state or region?
- Although societal factors (e.g., lack of insurance, economics, discrimination, lack of transportation) have an impact on health status, what local, state, and federal policies would have the greatest impact on eliminating health disparities?
- Are there programs or organizations in your state that have successfully developed a plan for strengthening local leadership?

"The setting and structure of this meeting allowed for an informal atmosphere in which we were able to objectively look at our current programs and to be open to new ideas."

– NPA Regional Meeting Participant

The Regional Conversations were foundational for advancing the NPA and developing the *National Stakeholder Strategy*. They also provided meeting participants an opportunity to increase their knowledge about health disparities as well as broaden the diversity of community involvement in identifying priorities, solutions, and barriers to improving the health status of racial and ethnic minority and other underserved populations (Exhibit 1-2 summarizes some of the issues identified by Regional Conversation participants). The conversations provided a venue for exchange of information, formation of new partnerships, and the development of targeted strategies for each region. From

EXHIBIT 1-2: EXAMPLES OF ISSUES IDENTIFIED BY REGIONAL CONVERSATION PARTICIPANTS

Awareness about Health Disparities:
- Medical providers are not familiar with the prevalence of certain diseases among minority populations.
- The definition of "health" is often narrowly defined and lacks awareness that health disparities affect all populations.

Community Engagement and Capacity:
- Communities are not involved in how funding is applied.
- There is a "disconnect" between federal and state agencies when establishing priorities.
- Limited planning and funding are given to capacity building within communities.
- Grant writers are not experienced in writing for minority populations.

Access to Health Care and Quality of Care:
- Lack of preventive care — health care is more disease-management based
- Lack of information and self-guided disease management
- Lack or limited access to care — often non-existent; sometimes based on perceived ability to pay for services
- Mental health is not recognized or acknowledged within many cultures and populations

Cultural and Linguistic Competency:
- Lack of culturally competent care
- Lack of linguistically competent care
- Minorities are not adequately represented in healthcare professions and throughout the healthcare system.
- Lack of culturally competent education for providers
- Lack of respect or acknowledgment for culturally specific healing traditions

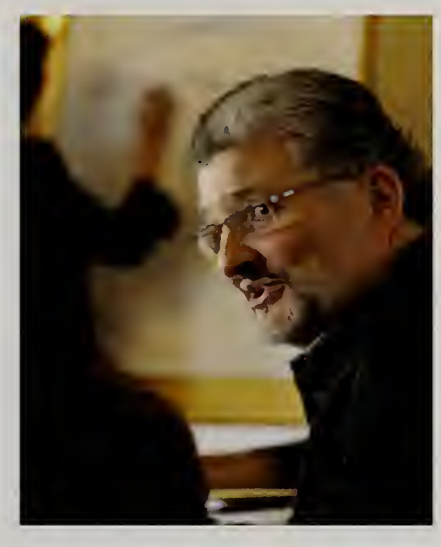
Data and Research:
- Small groups and subgroups are not included in data collection and sampling.
- Data are not shared among research institutions.
- Researchers and data collectors use tools of convenience and often will not travel into inner urban neighborhoods, to remote rural areas, or call cell phones (many people do not have landlines).

the outset, Regional Conversation participants identified "strengthening partnerships, enhancing capacity building initiatives, and improving access to care" as critical action steps for addressing health disparities.

Data Analysis, Input, and Content Refinement

A period of iterative analysis of data, input, and content refinement advanced the development of the *National Stakeholder Strategy*. This entire process is illustrated previously in Exhibit 1-1. Input from the Community Voices meetings and Regional Conversations was analyzed and organized, and then shared with community experts and federal representatives for further input and refinement. A federal team — the Federal Interagency Health Equity Team (FIHET) — provided sustained and continuing leadership for this process. The FIHET membership currently includes representatives from the federal departments of Health and Human Services, Agriculture, Commerce, Defense, Education, Housing and Urban Development, Justice, Labor, Transportation, Veterans Affairs, and Homeland Security, as well as from the Environmental Protection Agency.

A National Visionary Panel (NVP) was also convened to provide additional analysis and input. The panel represented a varied constituency of interests for eliminating health and healthcare disparities in the United States and was comprised of experts from community, public health, academic, healthcare, research, private sector, nongovernmental, and other national organizations and associations.



To begin the analysis process, the action step matrices prepared by participants from each Regional Conversation meeting were reviewed to identify the priorities that were common to all the regions. These were strategies for ending health and healthcare disparities that appeared repeatedly across regions. Ten *common* priority strategies emerged. A few regions identified *all* 10 common strategies as priorities for their constituencies; most regions only identified *some* of the common strategies as immediate priorities for their needs.

The 10 strategies common to all the regions were reviewed and refined by the FIHET and the NVP. The aim of the initial analysis of common strategies was to identify crosscutting strategies that could foster a common national reference point for shared action within and across regions. A common reference point for action also fosters efficient evaluation of outcomes.

The FIHET and the NVP identified an *additional 10 related strategies* that support and echo the 10 common strategies identified as priorities by Regional Conversation participants. FIHET and NVP representatives also contributed to linking the strategies to the five NPA goals. Thus, the *final 20 common strategies* provide a cohesive, comprehensive approach to ending health and healthcare disparities with broad applicability.

Meetings About Implementation and Evaluation of the National Stakeholder Strategy

Meetings with community practitioners and experts were also convened to begin exploring implementation and evaluation strategies for the *National Stakeholder Strategy*. These individuals were knowledgeable about a wide range of topics such as community collaboration, community engagement, multi-level support structures and processes, evaluation methods, and data analyses and reporting.

Reviews and Recommendations

The final stages of the development of the *National Stakeholder Strategy* involved input from a consensus meeting representing broad constituencies, an extended period of public review, and incorporation of public comments into the final strategy.

Consensus Meeting

OMH facilitated a meeting that brought together community leaders and other stakeholders to comment and vote on strategies, objectives, and measures. Seven expert panels presented on the strategies, objectives, and measures that had been developed throughout the *National Stakeholder Strategy* development process and provided recommendations for implementation and evaluation. Each panel was followed by a facilitated discussion where meeting participants could respond to the presentations and present additional priority objectives and measures that they believed would best support the NPA and *National Stakeholder Strategy*. At the end of each facilitated discussion, participants were asked to evaluate the information that was presented and discussed, and then vote for the strategies, objectives, and measures that they considered most aligned with the NPA and *National Stakeholder Strategy* goals.

Public Review

The draft *National Stakeholder Strategy* (identified as the *National Plan for Action* at that point in time) was posted online along with information requesting public comment. The process yielded a robust response from the public — approximately 2,200 comments were received, processed, and incorporated into the *National Stakeholder Strategy* wherever possible. Many comments provided information about the organizations submitting comments, health-related topics for inclusion in the *National Stakeholder Strategy*, general views about the *National Stakeholder Strategy*, and recommendations for specific additions and edits.

> "I feel this plan will bring forth true change, as a Community Leader I really feel that this will help us to build trust between our communities and healthcare industry."
>
> – Comment by Public Reviewer

SUMMARY

This section described the past, current, and future context for the *National Stakeholder Strategy* and the process by which it was developed. There is substantial evidence that supports the concerns about health disparities that were raised by community and other stakeholders who participated in the process that produced this strategy. Section 2 provides a detailed review of this evidence that confirms and identifies the wide range of health and healthcare disparities in this country. The evidence for health disparities provided in Section 2 lends context for the stakeholder-generated strategies and tools that are offered in Section 3 and which are the heart of the NPA.

Section 2: The Current Context

The Current Context

The information and data included in this section are intended to provide a view of the weight of the evidence that supports the experiences and concerns expressed by community and other stakeholders. The information and data are also intended to serve as a resource for individuals and organizations to aid them in shaping policies and driving action to end disparities. The evidence also provides further support for the goals and strategies presented in Section 3.

The literature on disparities is extensive, and a summation of all of the findings is not possible within the scope of this section; instead, only a synthesis of the key trends in health-disparities research is presented here.

The data in this section are reported by generally available race and ethnicity categories. Although race and ethnicity are related concepts, they represent two distinct classifications that are used in collecting population data. Ethnicity is a social grouping of a shared nationality or cultural origin (e.g., Hispanic/Latino and non-Hispanic/Latino). In this document, the term "Hispanic" designates Hispanic/Latino populations of any race, except as noted. Race is rooted in a social-political construct that takes into account social and cultural characteristics as well as some biological distinctions. The definitional distinctions are often nuanced. We also recognize that within racial and ethnic groupings there is variability with regard to culture, history, time in country, and identities. Federal standards designate racial categories as White; African American or Black; Asian; American Indian or Alaskan Native (AI/AN); and Native Hawaiian or Pacific Islander (NHOPI).[11] In this document, the terms "African American" or "Black" are used as they are used in the original data/information source. Data generally do not distinguish among Black immigrants from Sub-Saharan Africa, South America, the Caribbean, or U.S.-born African Americans. If some of these subgroups achieve at higher levels than others, this can mask disparities for the group of Blacks or African Americans as a whole (e.g., for higher education, employment, wealth). Similarly, some sources do not report data by "Asian," "Native Hawaiian," or "Pacific Islander" categories, thus this document also includes data/information for these populations under the term Asian/Pacific Islander (API) when that is all of the information that is categorically available.

For the demographic and other data presented, every attempt has been made to use the most up-to-date and reliable federal data sources. However, the availability of data for comparative purposes always poses a challenge. Often several years may pass between data collection and its availability for public use. Furthermore, due to logistical challenges, there is a persistent insufficiency in sample size, such that statistically significant data often are not available for some populations. This is especially true when

populations are grouped together for data collection purposes. For example, demographic data for Asian Americans, Native Hawaiians, and Pacific Islanders are often collected together. This type of grouping frequently masks and significantly underestimates the disparities that exist for subpopulations.

Underestimates of health status may have significantly adverse health consequences for the populations affected. Whenever awareness of health disparities is compromised due to misleading or unavailable data, there is a corresponding lost opportunity to focus on prevention, health care, research, and other efforts. As a result, the populations affected by inadequate or inaccurate data collection continue to suffer from poor health outcomes. These challenges highlight the ongoing need for widespread collection of accurate demographic data followed by rapid dissemination for evaluative purposes.

The issue of data availability for all populations, using established racial categories, was raised as a key concern by stakeholders who informed the development of this strategy. Although the HHS Data Council Working Group on Racial and Ethnic Data, as well as the Data Work Group of the HHS Initiative to Eliminate Racial and Ethnic Disparities in Health, issued a joint report for improving the collection and use of racial and ethnic data, many recommendations have not been realized.[81]

The information in this section is organized under the following topics, which were raised by the community stakeholders as areas of concern:

1. **Demographics of the United States** — Includes a discussion of the geographic and urban/rural distribution of the U.S. population, as well as information on the populations of Island Areas and on foreign-born populations.

2. **Health disparities by population and geography** — Provides an overview of health and healthcare disparities for particular populations (e.g., racial, ethnic, rural, urban, children, adolescents, people with disabilities, LGBT).

3. **Health disparities by disease or health concern** — Offers a wide-ranging overview of infant, adolescent, maternal, and adult morbidity, disability, and mortality disparities, and highlights selected diseases and conditions where significant disparities are known to exist: cardiovascular disease, cancer, HIV/AIDS, diabetes, chronic lower respiratory diseases, viral hepatitis, chronic liver disease and cirrhosis, kidney disease, arthritis, injury deaths, violence, behavioral health, and oral health.

4. **Determinants of health** — Includes a selected overview of *social determinants* of health (e.g., gender; poverty and socioeconomic status; employment; educational attainment; food

security; housing and transportation; psychological stress; racism; pain management; the health system); *behavioral determinants* of health (e.g., overweight and obesity; exercise; illicit drugs; tobacco; alcohol); *environmental determinants* of health (e.g., blood lead, asthma, workplace environment); and *biological and genetic determinants* of health.

5. **Healthcare workforce** — Provides an overview of issues related to building a diverse workforce.

DEMOGRAPHICS OF THE UNITED STATES

Understanding the demographics and geographic distribution of population groups in the United States is important in planning for varying health needs in different parts of the country. While it is not possible to include information on all groups of interest, selected population data are provided below.

Geographic Distribution

As shown in Exhibit 2-1 for 2008 data, Whites comprise about 80 percent of the population in all regions of the country.[a] African Americans are about 13 percent of the population nationally but are more highly represented in the South and less so in the West. American Indians and Alaskan Natives are 1 percent of the U.S. population and are only slightly more represented in the West. Asians comprise about 4.5 percent of the national population, with the majority residing in the Western region. Native Hawaiians and Pacific Islanders comprise less than 0.2 percent of the populace throughout the country, but are slightly more represented in the West. Multiracial individuals comprise approximately 2 percent of the population across geographic regions. Approximately 15 percent of the country is Hispanic and proportions vary considerably by geographic location with the highest percentage in the West. The Census Bureau projects that over the next 40 years, the American population will be older and more diverse.[82]

Census 2000 data also indicates that two groups — Blacks, and American Indians and Alaskan Natives — had the highest overall estimated disability rate (24.3 percent). The distribution of people with disabilities is highest in the South (38.3 percent) and lowest in the Northeast region of the country (19.0 percent).[83]

In 2005, the South had the largest number of older Americans followed by the Midwest, Northeast, and West.[84] There are more older female adults than older male adults.[85] The geographic distribution of older adults and larger number of older women pose important social, economic, health, and other considerations as the American population ages. Exhibit A-1 in Appendix A provides additional demographic information.

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[a] U.S. census Bureau's geographic regional designations: Northeast, Midwest, South, West. These designations are not equivalent to the 10 HHS health region designations.

Exhibit 2-1: Geographical Distribution of United States Population by Race/Ethnicity, 2008
Population numbers and percentage of total population

	U.S.	Northeast[b]	Midwest[c]	South[d]	West[e]
Gender					
Male	149,924,604 (49.31%)	26,740,485 (48.69%)	32,797,335 (49.27%)	54,885,816 (49.13%)	35,500,968 (50.10%)
Female	154,135,120 (50.69%)	28,184,294 (51.31%)	33,764,113 (50.73%)	56,832,733 (50.87%)	35,353,980 (49.90%)
Total[a]	*304,059,724 (100%)*	*54,924,779 (100%)*	*66,561,448 (100%)*	*111,718,549 (100%)*	*70,854,948 (100%)*
Race					
White	242,639,242 (79.80%)	44,152,158 (80.39%)	56,638,126 (85.09%)	84,690,175 (75.81%)	57,158,783 (80.67%)
Black	39,058,834 (12.85%)	6,880,762 (12.53%)	6,913,392 (10.39%)	21,609,392 (19.34%)	3,655,288 (5.17%)
AI/AN	3,083,434 (1.01%)	222,957 (0.41%)	471,590 (0.71%)	920,694 (0.82%)	1,468,193 (2.07%)
Asian	13,549,064 (4.46%)	2,852,517 (5.19%)	1,600,194 (2.40%)	2,837,889 (2.54%)	6,258,464 (8.83%)
NHOPI	562,121 (0.19%)	45,196 (0.08%)	36,815 (0.06%)	96,447 (0.09%)	383,663 (0.54%)
Two or more races	5,167,029 (1.70%)	771,189 (1.40%)	901,331 (1.35%)	1,563,952 (1.40%)	1,930,557 (2.73%)
Total[a]	*304,059,724 (100%)*	*54,924,779 (100%)*	*66,561,448 (100%)*	*111,718,549 (100%)*	*70,854,948 (100%)*
Ethnicity					
Not Hispanic/Latino	257,116,111 (84.56%)	48,503,638 (88.31%)	62,297,470 (93.59%)	95,198,450 (85.21%)	51,116,553 (72.14%)
Hispanic/Latino	46,943,613 (15.44%)	6,421,141 (11.69%)	4,263,978 (6.41%)	16,520,099 (14.79%)	19,738,395 (27.86%)
Total[a]	*304,059,724 (100%)*	*54,924,779 (100%)*	*66,561,448 (100%)*	*111,718,549 (100%)*	*70,854,948 (100%)*

Source: U.S. Census Bureau, FactFinder, Data Sets, Annual Population Estimates, 2008 Population Estimates, Detailed Tables T3-2008, T4-2008, T-8-2008 by region. Geographical areas are U.S. Census designations. The U.S. Census Bureau includes only states data under the geographical areas shown here. District of Columbia and U.S. Island Areas are not included.

[a] Percentages may not sum to 100% due to rounding effects.

[b] The Northeast region includes: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, and Pennsylvania.

[c] The Midwest region includes: Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

[d] The South region includes: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, and Texas.

[e] The West region includes: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington.

http://factfinder.census.gov/

Urban and Rural Populations

Awareness of the urban and rural distribution of an area's residents is important for understanding health needs, access to resources, and factors that influence health. Exhibit 2-2 shows that 40 percent of American Indians and Alaskan Natives and 27 percent of Whites reside in rural areas. In contrast, Asians, Hispanics, Native Hawaiians and Pacific Islanders, and Blacks are more likely to reside in urban areas. Exhibits A-2 and A-3 in Appendix A display additional information about population density and urban/rural distribution in the U.S. Census geographic regions.

Exhibit 2-2: United States Urban/Rural Populations, 2006–2008

Race/Ethnicity	Percentage of each population	
	Urban	Rural
All	*77.1*	*22.9*
White	73.2	26.8
Black	88.2	11.8
AI/AN	59.8	40.2
Asian	92.9	7.1
NHOPI	89.9	10.1
Two or more races	82.4	17.6
Hispanic	90.8	9.2

Source: U.S. Census Bureau, Factfinder, Datasets. IN: 2006-2008 American Community Survey 3-Year Estimates, Detailed Tables B02001and B03002, United States. AI/AN=American Indian & Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander.
http://factfinder.census.gov/

Island Areas

Puerto Rico, the U.S. Virgin Islands, the Pacific Jurisdictions (American Samoa, Commonwealth of the Northern Mariana Islands, and Guam), and the Freely Associated States (Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau) include nearly 4.6 million people of which 87 percent reside in Puerto Rico. Collectively the Pacific Jurisdictions and the Freely Associated States are home to nearly 490,000 people, have fewer total residents than Wyoming (the least populated state), and extend across an ocean area that is larger than the continental United States.[86] The U.S. Virgin Islands has a resident population that is similar in number to islands in the Pacific Jurisdictions.

Life expectancy and infant mortality differ for Puerto Rico, the U.S. Virgin Islands, Pacific Jurisdictions, and the Freely Associated States. For example, the infant mortality rate for the U.S. Virgin Islands and Puerto Rico is 1.3 times that of the U.S. rate. For the Freely Associated States, the infant mortality rate ranges from two to four times the U.S. rate. In 2008, people in the three Freely Associated States also had a shorter life expectancy than people in the U.S. (Exhibit 2-3).

Exhibit 2-3: Demographic Indicators for United States Island Areas, 2009

Demographic Indicators	American Samoa	CNMI	Guam	FSM	RMI	Republic of Palau	United States
Population							
Population (in thousands)	65	51	178	107	65	21	307,212
Population growth rate (percent)	1.2	-7.1	1.4	-0.2	2.1	0.4	1
Net migration rate[a] (per 1,000 population)	-7	-90	0	-21	25	1	4
Fertility rate[b] (births per woman)	3.3	2.2	2.5	2.9	3.6	1.8	2.1
Mortality							
Life expectancy at birth (years)	-7	77	78	71	71	71	78
Infant mortality rate[c] (per 1,000 births)	10	6	6	25	25	13	6
Child mortality rate[d] (per 1,000 births)	13	3	7	32	31	16	8
Death rate (per 1,000 population)	4	3	5	4	4	8	8

Source: U.S. Census Bureau, International Data Base, data access by country, 2009. United States territories are: American Samoa; Commonwealth of the Northern Mariana Islands (CNMI); Guam; Puerto Rico; U.S. Virgin Islands. Freely Associated States are: Federated States of Micronesia (FSM); Republic of the Marshall Islands (RMI); Republic of Palau.

[a] "The difference between the number of migrants entering and those leaving a country in a year, per 1,000 midyear population. A positive figure is known as a net immigration rate and a negative figure as a net emigration rate."

[b] "The average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to a given set of age-specific fertility rates."

[c] Under age one.

[d] Under age five.

http://www.census.gov/ipc/www/idb/informationGateway.php

Foreign-Born Populations

Understanding the characteristics of foreign-born individuals in the United States provides an opportunity to assess and plan for cultural, language, and other factors that influence health and well-being. Overall, 12.5 percent of the U.S. population is foreign born. The largest percentage of the foreign-born population is from Latin America, followed by Asia and Europe. Slightly more than half (52 percent) of the foreign-born population speaks English less than "very well."[87] HHS divides the country into 10 regions. The highest concentration of foreign-born persons is in Region IX (24.8 percent consisting of Arizona, California, Hawaii, Nevada, and the U.S. Associated Pacific Basin) while the lowest concentration is in Region X (10.4 percent) consisting of Alaska, Idaho, Oregon, and Washington (Exhibits A-4 and A-5 in Appendix A).

HEALTH AND HEALTHCARE DISPARITIES BY POPULATION AND GEOGRAPHY

Healthcare Disparities Reporting

This subsection provides a brief overview of health and healthcare disparities, organizing them with reference to particular populations. In so doing, this subsection complements the one that follows, which organizes disparities by particular diseases or health concerns. We will begin with a brief discussion of current healthcare disparity reporting for at-risk populations. The remainder of the subsection provides brief summaries that spotlight disparities for racial and ethnic populations, rural and urban populations, children and adolescents, people with disabilities, and LGBT populations.

AHRQ tracks healthcare disparities and information pertinent to improving them in its annual National Healthcare Disparities Report (NHDR)[38] and National Healthcare Quality Report (NHQR).[13] AHRQ also monitors clinical performance (how well providers deliver needed services); patient assessments (how well providers meet healthcare needs from the patient's perspective); and health outcomes (benefits or detriments of the care delivered and its quality). The following are key examples of treatment disparities as reported in the 2009 NHDR.[38]

- In 2006, Blacks, Asians, and Hispanics were more likely to report poor communication with their health provider than were Whites.
- In 2006, Hispanic adults were less likely to receive advice from a health provider to quit smoking compared with non-Hispanic White adults.
- In 2006, the percentage of obese adults who received advice from a health provider about eating fewer high-fat or high-cholesterol foods was significantly lower for Blacks than for Whites and Hispanics compared to non-Hispanic Whites.
- From 2000 to 2007, the percentage of nursing home residents who were physically restrained was higher for Hispanics than for Whites.
- In 2008, the percentage of hospice patients whose families reported that they did not receive the right amount of medication for pain was significantly higher for Hispanics, Blacks, and American Indians and Alaskan Natives than for Whites.

- In 2007, the percentage of appropriately timed antibiotics provided to surgery patients was lower for Blacks, Asians, American Indians and Alaskan Natives, and Hispanics than for Whites.

- Between 2005 and 2007, Hispanic and American Indians and Alaskan Native adult patients with heart failure were less likely than their White counterparts to receive complete written discharge instructions.

AHRQ reports for different time periods also shown that healthcare disparities experienced by Blacks, Asians, Hispanics, American Indians and Alaskan Natives, and poor Americans have stayed the same or worsened.[9]

Racial and Ethnic Populations

There are many disparities that affect racial and ethnic populations in the United States. These and other disparities will be discussed in more detail in the "Health Disparities by Disease or Health Concern" subsection.

American Indian and Alaskan Native Population

American Indians and Alaskan Natives, for instance, suffer from higher rates of mortality due to diabetes, unintentional injury, and motor vehicle crash deaths. Various sources note that mortality rates for American Indian and Alaskan Native populations have been underestimated due to the miscoding of race on death certificates.[88]. Data comparing adjusted mortality rates for American Indians and Alaskan Natives from 2002–2003 to mortality rates of all U.S. races in 2003 reveals much higher disparities than are otherwise evident (Exhibit 2-16). By this analysis, tuberculosis deaths are nearly nine-fold and alcohol-induced deaths are nearly seven-fold for American Indians and Alaskan Natives compared to the general U.S. population. Cervical cancer, homicide, and suicide deaths are about two-fold higher for American Indians and Alaskan Natives compared to the general U.S. population.

Exhibit 2-4: Indian Health Service Mortality Disparity Table
American Indian and Alaskan Natives (AI/AN) in the IHS Service Area, 2004–2006 and 1996–1998
U.S. All Races, 2005 and 1997

Cause of Death	Rate: AI/AN 2004-2006	Rate: U.S. All Races 2005	Ratio: AI/AN 2004-2006 U.S. All Races 2005	Rate: AI/AN 1996-1998	Rate: U.S. All Races 1997	Ratio: AI/AN 1996-1998 U.S. All Races 1997
All Causes	*980.0*	*798.8*	*1.2*	*1,071.7*	*877.7*	*1.2*
Alcohol-Induced[1]	43.0	7.0	6.1	45.0	4.0	11.3
Breast Cancer	21.0	24.1	0.9	19.8	28.9	0.7
Cerebrovascular Disease	46.6	16.6	2.8	62.7	61.1	1.0
Cervical Cancer	3.3	2.4	1.4	5.2	3.2	1.6
Diabetes	68.1	24.6	2.8	77.1	23.7	3.3
Diseases of the Heart	206.2	211.1	1.0	271.5	211.1	1.0
HIV Infection[2]	3.0	4.2	0.7	3.3	6.0	0.6
Homicide (Assault)	11.7	6.1	1.9	12.6	7.0	1.8
Infant Deaths[3]	8.0	6.9	1.2	8.9	7.2	1.2
Malignant Neoplasm (All)	176.2	183.8	1.0	187.0	203.5	0.9
Maternal Deaths[4]	16.9	15.1	1.1	8.0	8.4	1.0
Motor Vehicle Crashes	46.7	15.2	3.1	43.2	15.9	7.2
Pneumonia & Influenza	27.1	20.3	1.3	31.3	33.3	0.9
Suicide (Intentional Self-harm)	19.8	10.9	1.8	17.9	11.7	1.6
Tuberculosis	7.2	0.2	6.0	2.0	0.4	5.0
Unintentional Injuries[5]	93.8	39.1	2.4	97.1	35.8	2.7

[1] Rate of alcohol-induced deaths is for the 1979-1981 three-year period. The U.S. all-races rate is for 1980.
[2] HIV was first classified in 1987. Rate of HIV is for the 1987-1989 three-year period. The U.S. all-races rate is for 1988.
[3] Per 1,000 live births.
[4] Rate per 100,000 live births. Rate does not meet the standards of reliability due to small numbers. The break in comparability for maternal mortality has not been quantified by NCHS.
[5] Unintentional injuries include motor vehicle crashes.
Note: ICD-10 codes were introduced in 1999. Comparability ratios have been applied to the 1996-1998 age-adjusted rates.
The 1997 U.S. all-races rates have been age-adjusted to the 2000 standard population. Comparability ratios have been applied.
American Indian and Alaskan Native (AI/AN) age-adjusted rates are adjusted to compensate for misreporting of AI/AN race on state death certificates.
Source: Unpublished data: OPHS/Division of Program Statistics (1996-1998 and 2004-2006 AI/AN rates based on 2000 census with bridged-race categories).
Ratio between American Indian and Alaskan Native (AI/AN) and U.S. all-races rate.
Date: JANUARY, 2011

Exhibit 2-5 provides an overview snapshot of some of the health and healthcare disparities for racial and ethnic populations.

Exhibit 2-5: A Snapshot of Disparities in Health and Health Care, 2004–2009

Population	Year	Disparity
African Americans	2007–2009	Influenza vaccination rate for adults 65 and older was 53.4% compared to 68.3% for Whites.[1]
	2004–2006	Infant mortality rates were 2.3 times higher than for White infants.[2]
	2005–2007	Compared to Whites, mortality rates were:[3] • 2.1 times higher for diabetes mellitus • 2.2 times higher for prostate cancer • 6.0 times higher for homicide • 8.8 times higher for HIV
	2009	Compared to Whites, there were: • 2.0 times more hospital admissions for diabetes-related lower extremity amputations[4] • 1.8 times more new AIDS cases[5] • 1.4 times as many women who did not receive prenatal care in the first trimester[6]
American Indians and Alaskan Natives	2004–2006	Infant mortality rates were 1.5 times higher than for White infants.[7]
	2005–2007	Compared to Whites, mortality rates were:[8] • 1.8 times higher for diabetes mellitus • 1.8 times higher for homicide • 2.6 times higher for chronic liver disease and cirrhosis Compared to Whites, mortality rates were:[9] • 1.6 times higher for motor vehicle-related injuries
	2009	The number of women who did not receive prenatal care in the first trimester decreased; it is now 0.1% higher than for Whites.[10]
	2007	AI/AN were twice as likely to contract Hepatitis C as compared to Whites.[11]
Asians, Native Hawaiian and Pacific Islanders	2004–2006	Infant mortality rates were 1.7 times higher for Hawaiians than for White infants.[12]
	2005–2007	Major cardiovascular disease was the number one cause of death for Asian Americans and Pacific Islanders.[13]
	2007	Asian Americans were 1.6 times more likely to contract Hepatitis A as compared to Whites.[14]
	2009	Compared to Whites, Asians were: • 1.2 times more likely not to have had a doctor's office or clinic visit in the last 12 months where health providers listened carefully, explained things clearly, respected what they had to say, and spent enough time with them[15]
Hispanics/ Latinos	2007–2009	Influenza vaccination rate for older adults was 55.0% compared to 68.3% for non-Hispanic Whites.[16]
	2005–2007	Compared to Whites, mortality rates were:[17] • 1.5 times higher for chronic liver disease and cirrhosis • 1.4 times higher for diabetes mellitus • 2.0 times higher for homicide • 2.1 times higher for HIV
	2009	Compared to non-Hispanic Whites: • The number of women who did not receive prenatal care in the first trimester decreased; it is now 0.1% higher than for Whites[18] • There were 3.3 times more new AIDS cases per 100,000 of the population age 13 and over[19]

Exhibit 2-5 (cont'd)

1. Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Vaccinations for influenza and pneumonia, ages 1+: US, 1993-2009 (Source: NHIS). www.cdc.gov/nchs/hdi.htm
2. Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Infant mortality by cause: US/State 2001-2006 (Source: NVSS). www.cdc.gov/nchs/hdi.htm
3. Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality by underlying cause, ages 18+: US, 1981-2007 (Source: NVSS). www.cdc.gov/nchs/hdi.htm
4. Agency for Healthcare Research and Quality. National Healthcare Disparities Report, 2010, H-13. http://www.ahrq.gov/qual/nhdr10/nhdr10.pdf
5. Centers for Disease Control and Prevention. Topics: Statistics and Surveillance. AIDS diagnoses by race/ethnicity, 2009. http://www.cdc.gov/hiv/topics/surveillance/basic.htm#aidsrace
6. Centers for Disease Control and Prevention. Pregnancy Nutrition Surveillance System, 2009. Table 10D: Maternal behavioral indicators by race/ethnicity, age, or education. http://www.cdc.gov/PEDNSS/pnss_tables/pdf/national_table10.pdf
7. Centers for Disease Control and Prevention, *op. cit.*, note 2.
8. Centers for Disease Control and Prevention, *op. cit.*, note 3.
9. Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Injury mortality: US/State, 1999-2007 (Source: NVSS). www.cdc.gov/nchs/hdi.htm
10. Centers for Disease Control and Prevention, *op. cit.*, note 6.
11. U.S. Department of Health and Human Services. Office of Minority Health. Data and Statistics: Hepatitis. http://minorityhealth.hhs.gov/templates/content.aspx?lvl=3&lvlid=541&ID=6494
12. Centers for Disease Control and Prevention, *op. cit.*, note 2.
13. Centers for Disease Control and Prevention, *op. cit.*, note 3.
14. U.S. Department of Health and Human Services, *op. cit.*,, note 11.
15. Agency for Healthcare Research and Quality, *op. cit.*, note 4.
16. Centers for Disease Control and Prevention, *op. cit.*, note 1.
17. Centers for Disease Control and Prevention,*op. cit.*, note 3.
18. Centers for Disease Control and Prevention, *op. cit.*, note 6.
19. Agency for Healthcare Research and Quality, *op. cit.*, note 4.

Geographic Variations

Generally, rural and urban areas have significantly different health-related concerns, health risks, and healthcare resources. For example, rural residents are more likely to be elderly, poor, and in only fair or poor health. They are also more likely to have chronic health conditions compared to their urban counterparts.[89] Among other factors, urban populations have higher rates of specific health concerns (e.g., asthma, lead poisoning) that contribute to disparities between populations.

Children and Adolescents

Children and adolescents are particularly vulnerable segments of our population and experience significant health disparities. For example, AHRQ reported that:[90]

- Children from poor families and near-poor families were less likely to receive all recommended vaccines in 2007 than were children from high-income families.

- Uninsured children and children with public insurance were less likely to have a "usual source of care" than were children with private insurance.
- Black children were more likely to be admitted to the hospital for asthma than were other children.
- Less than 40 percent of children ages 12-17 who had a major depressive episode in 2007 received treatment.
- Children who are younger, uninsured, or who live in a household where English is not the primary language were less likely than their counterparts to have had a dental visit.

In addition, adolescents and young adults are particularly at risk for injury deaths compared to other ages. As discussed later in this section, unintentional injury, homicide, and suicide are more common in this demographic. Further, disparities and particular risks exist for children and adolescents in many areas including behavioral health, violence, blood-lead levels, asthma, and use of illicit drugs, tobacco, and alcohol.

A stable home environment is an important component for the health and well-being of young people. Two-parent, married families as well as engaged fathers can provide a strong basis for raising children and adolescents.[91, 92]

People with Disabilities

In recent years, new attention has been given to the health and healthcare disparities experienced by persons with disabilities. As one measure of disability, more than 20 percent of the adult population in the United States self report as having limitations in their activities due to physical or emotional problems — with even higher percentages for some racial groups and for less-educated or lower-income individuals. Among the central challenges for underserved populations are the limited availability of data (especially for children with disabilities) and the varied approaches to measuring and defining disability. AHRQ measures disability as limitations in basic activities (mobility and basic functioning) and/or complex activities (interactions with one's environment and/or community life).[38]

Examples of important health-related concerns that people with disabilities might encounter include:

- The inability to read the list of available healthcare providers on a website because the data are coded in such a fashion that it is not compatible with a screen reader used by some people with disabilities
- The inability to create a personal health record using readily available commercial, off-the-shelf software because the software is not usable by someone dependent on assistive technology

- The inability to understand what is said on a video playing in a medical or dental office waiting area because it is not captioned for people who are deaf

- The inability by someone with a hearing loss to use a telephone provided at a hospital bedside because the receiver is not hearing-aid compatible

Lesbian, Gay, Bisexual, and Transgender Populations

Healthy People 2010's companion document on Lesbian, Gay, Bisexual, and Transgender Populations (LGBT) health increased recognition of the specific issues facing LGBT populations.[93] The report identified key health concerns including access to quality care, HIV/AIDS, and barriers to conducting research. Although there is a paucity of national data, more than a decade of research indicates LGBT populations experience health and healthcare disparities. Findings include:

- LGBT sexual orientation and gender have been associated with elevated rates of alcohol consumption, tobacco use, and substance abuse.[34, 94, 95, 96, 97]

- LGBT, especially youth, experience high levels of mental disorders such as anxiety, depression, and suicidal thoughts. LGBT youth are at high risk for suicide attempts and completions.[98]

- Women in the LGBT community receive routine preventive breast cancer and Pap smear screening less frequently despite evidence showing their risk of developing breast and cervical cancer.[35, 99]

In 2010, the Institute of Medicine (IOM) began efforts to assess the state of the science on health status of LGBT populations. The upcoming report will also identify research gaps and opportunities; consider training needs for improved research; and outline an agenda to help strengthen future research.[36]

HEALTH DISPARITIES BY DISEASE OR HEALTH CONCERN

This subsection provides brief summaries of generally well-known health and healthcare disparities in the United States, some of which were shared by the community stakeholders who participated in the regional meetings that were discussed in Section 1. The amount and availability of data for different populations varies considerably. The disparities described below should be considered in light of the determinants of health, which are presented later in this section.

Infant and Maternal Mortality

Disparities in infant mortality rates are particularly egregious, putting the United States at the bottom of developed countries in this regard. African American infants are especially at risk for death in the first year of life with mortality rates that range from two times to more than three times that of White infants — resulting from diseases of the circulatory system, pneumonia, maternal complications, prematurity and low birthweight, Sudden Infant Death Syndrome (SIDS), unintentional injury, and homicide (Exhibit 2-6).

Exhibit 2-6: United States Infant Mortality Rate by Race and Ethnicity, 2004–2006
Mortality rate per 100,000 live births

Cause of Death	*All*	White	Black	AI/AN	API	Hispanic
Diseases of the circulatory system	*13.2*	10.9	24.5	15.6	13.3	10.2
Pneumonia	*5.9*	4.6	12.8	17.1	3.7	4.4
Maternal complications of pregnancy	*41.2*	31.4	96.9	23.6	27.7	28.4
Prematurity and low birthweight	*113.1*	81.0	291.6	88.6	76.5	87.4
Birth defects	*136.3*	131.6	167.9	171.7	108.4	139.9
Sudden Infant Death Syndrome (SIDS)	*54.4*	47.0	99.6	110.6	23.5	27.6
Unintentional injury	*26.2*	22.7	47.1	59.3	12.0	15.8
Homicide	*7.5*	6.3	14.1	17.8	3.6	6.6
All causes	*677.1*	*565.2*	*1,312.8*	*825.8*	*470.0*	*552.2*

Source: Centers for Disease and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expenctancy. Infant mortality by cause, US/state, 2001–2006 (source: NVSS). Data for 2004 presented here. Data are for infants ages 0-365 days.
AI/AN=American Indian & Alaskan Native; API=Asian & Pacific Islander.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011

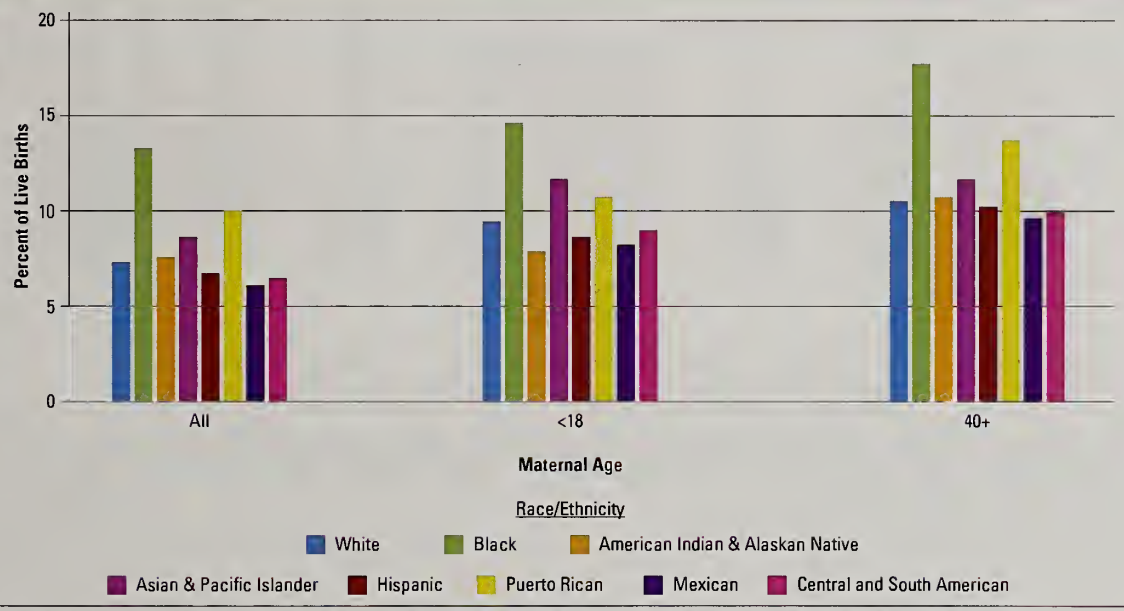
Similarly, American Indian and Alaskan Native infants die at two to three times the rate of White infants from SIDS, unintentional injury, and homicide — and more than 4.5 times that of White infants from pneumonia. Infant mortality rates for the Federated States of Micronesia, Republic of the Marshall Islands, Palau, and American Samoa are also higher than the rate for the United States (see Exhibit 2-3).

The maternal mortality rate has increased in the past few decades after dramatic declines from the early 20th century. Some of the apparent increase may reflect coding and classification of maternal deaths. However, in 2006 there were 13.3 deaths per 100,000 live births, which represents an increase from a low of 6.6 deaths per 100,000 live births in 1987. The rate for non-Hispanic Black women was more than three

times that of non-Hispanic White women. The risk of maternal death increases with age for all racial and ethnic women. In 2006, the maternal mortality rate of women aged 35 years and over was nearly six times the rate of women under 20 years of age.[100]

Prematurity and low birthweight are a primary cause of infant deaths in the United States; one in eight infants are born prematurely each year.[101] Infants who are 2,500 grams or less at birth (low birthweight) are also at increased risk for poor health outcomes and disabilities (e.g., mental retardation, learning problems, hearing and vision loss).[102] While advanced maternal age is associated with increased low birthweight for all racial and ethnic groups, it is an even higher risk for African Americans and Puerto Ricans.[103] Exhibit 2-7 shows the risk of low birthweight among women by age and race and ethnicity.

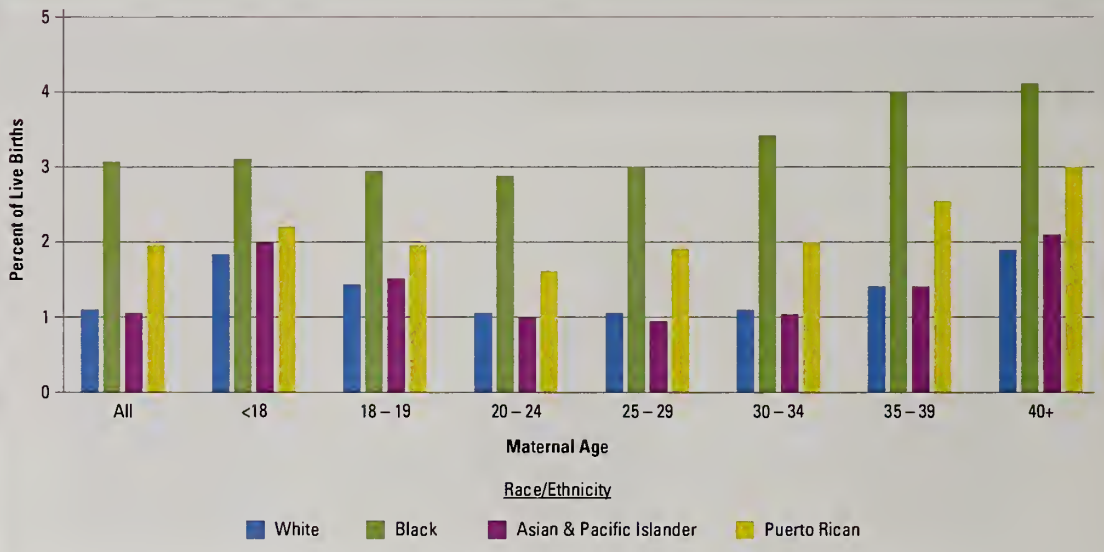
Exhibit 2-7: Low Birthweight by Maternal Age, United States, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Pregnancy and birth. Low birthweight, US/state, 1996-2007 (source: NVSS). Data for 2005-2007 presented here. Data are for maternal ages indicated.
Low birthweight=less than 2500 grams.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Very low birthweight infants (weighing less than 1500 grams at birth) are approximately 100 times more likely to die compared to those who are born with a normal weight.[104] Low birthweight infants are more likely to be born among non-Hispanic Blacks and Puerto Rican mothers. Further, low birthweight is high for younger women, declines to its lowest levels at ages 20-24, and then continually increases to the highest levels for mothers ages 40 and older. This pattern as it relates to maternal age is similar for all racial and ethnic women (Exhibit 2-8).

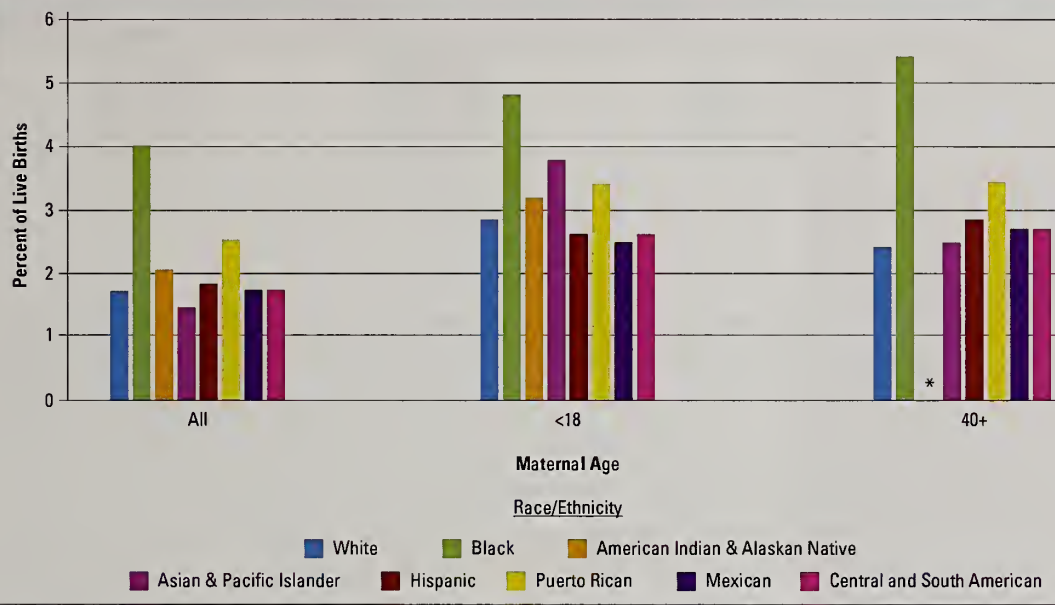
Exhibit 2-8: Very Low Birthweight by Maternal Age, United States, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Pregnancy and birth. Low birthweight, US/state, 1996-2007 (source: NVSS). Data for 2005-2007 presented here. Data are for maternal ages indicated.
Very low birthweight=less than 1500 grams.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Preterm-related deaths account for more than one-third of all deaths during the first year of life and have a dramatic effect on the status of infant health in the United States.[105] For women less than 18 years of age, very preterm births (infants less than 32 weeks gestation) are highest for Black, Asian and Pacific Islander, and Puerto Rican women. By age 40 or older, rates of very preterm births are up to 2.4-fold higher for Black women compared to women of other races (Exhibit 2-9).

Exhibit 2-9: Very Preterm Birth by Maternal Age, United States, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Pregnancy and birth. Preterm birth, US/state, 1996-2007 (source: NVSS). Data for 2005-2007 presented here. Data are for maternal ages indicated.
Very preterm=gestational age less than 32 weeks.
*Data not available.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Adult Disability, Morbidity, and Mortality

Some of the leading causes of death in the United States include cardiovascular disease, cancer, HIV/AIDS, diabetes, chronic lower-respiratory disease, chronic liver disease and cirrhosis, Hepatitis B and C, kidney disease, and injury deaths. A discussion of disparities follows for specific diseases and conditions. Exhibit 2-10 provides a snapshot of mortality rates for these diseases.

Exhibit 2-10: United States Adult Mortality Rates by Race and Ethnicity, 2005–2007
Mortality rate per 100,000 population

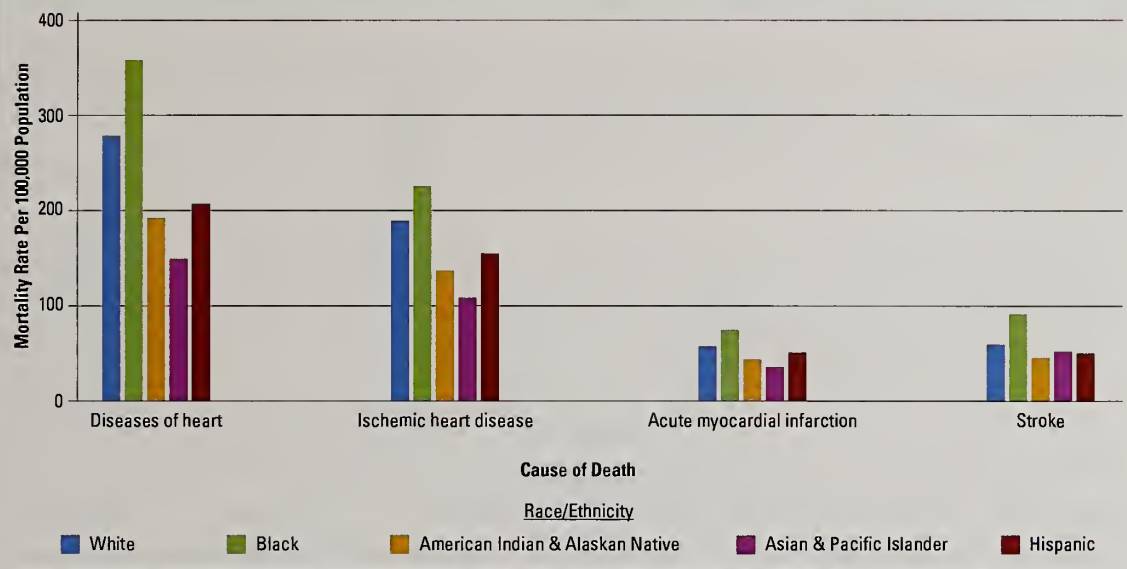
Cause of Death	*All*	White	Black	AI/AN	API	Hispanic
Diseases of heart	*269.9*	265.6	347.9	182.9	144.2	195.5
Cancer	*243.0*	241.7	293.6	161.5	144.3	159.1
Trachea, bronchus, and lung	*69.5*	70.3	76.6	44.1	34.1	28.7
Colon, rectum, and anus	*23.1*	22.5	32.6	15.6	14.7	16.7
Prostate	*12.5*	11.6	25.1	8.4	5.5	9.8
Breast	*17.7*	17.2	25.4	10.1	8.8	10.9
Chronic lower respiratory diseases	*55.8*	58.8	38.6	39.2	19.1	24.2
Influenza and pneumonia	*24.1*	24.0	26.4	21.3	19.5	19.9
Chronic liver disease and cirrhosis	*12.0*	12.5	9.9	31.2	4.6	18.4
Diabetes mellitus	*31.6*	28.8	60.5	53.2	21.8	41.3
HIV	*5.3*	2.8	24.7	3.4	0.7	5.9
Unintentional injuries	*49.6*	51.4	46.7	68.4	21.2	38.4
Suicide	*14.4*	15.9	6.6	14.3	7.3	7.2
Homicide	*7.3*	4.4	26.2	8.5	3.1	8.6
All causes	*1,027.9*	*1,014.3*	*1,293.2*	*840.5*	*561.7*	*743.5*

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18 and over, US/state, 1999-2007 (source: NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for AI/AN, API, and Hispanic populations may be underestimated.
HIV=human immunodeficiency virus; AI/AN=American Indian & Alaskan Native; API=Asian & Pacific Islander
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Cardiovascular Disease

Heart disease is the leading cause of death for people of most racial and ethnic groups in the United States[106] and the overall adult mortality rate from this disease is high (Exhibit 2-11). Both Whites and Blacks have high levels of heart disease compared to the other populations shown, although Blacks have rates that are 31 percent higher than Whites.[107, 108] Stroke is the third leading cause of death in the United States and the cause of significant disabilities for nearly 1.1 million people in 2005.[109] Blacks and Whites have higher mortality rates for stroke than do other racial or ethnic groups.

Exhibit 2-11: United States Adult Mortality Rates for Cardiovascular Diseases, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18+, US/state, 1999-2007 (source: NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for American Indian and Alaskan Native, Asian and Pacific Islander, and Hispanic populations may be underestimated.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Disparities by geography and socioeconomic status (SES) are typical of both heart disease and stroke. People living in the southeastern United States having less than a high school education and earning less than $15,000 per year are more likely to die of heart disease or suffer from stroke compared to the rest of the country[109, 110] (Exhibits A-6 and A-7 in Appendix A).

Cancer

Cancer has a disproportionately adverse affect on certain racial and ethnic populations, individuals of low SES, and in specific geographic areas.[111, 112] For example, incidence of deaths from cervical cancer and lung cancer are higher in some of the southern and adjacent states. The incidence of death from ovarian cancer is higher in some of the northern mountain and northern central states. Additionally, cancer is the number one killer of Asian and Pacific Islander populations (while heart disease is the leading cause of death for all other racial and ethnic populations). A summary follows of the mortality rates for certain type of cancers and of the populations with the highest disparities (see also Exhibits 2-12 and 2-13):

- Lung cancer is the most common cause of cancer-related death in men and women. Incidence and mortality rates have dropped for men in the past decade, but not for women.[113] African Americans and Whites have the highest mortality rates from lung cancer.

- Breast cancer is the second leading cause of cancer mortality in women. Although the overall breast cancer death rate has dropped steadily, the gap between African Americans and Whites is wider than it was in the 1990s.[114] African Americans have the highest mortality rate from breast cancer.

- Prostate cancer is the second leading cause of cancer mortality in men. Although incidence and mortality have been declining for most populations since the early 1990s, the gap between African Americans and other races and ethnicities has remained large.[115] African American men have the highest mortality rates from prostate cancer.

- Cancers of the colon and rectum (colorectal cancer) are the third leading cause of cancer-related mortality in men and women. Colorectal cancer incidence and mortality has decreased for most populations over the past decade.[116] However, incidence rates for American Indians and Alaskan Natives have increased. African Americans continue to have the highest mortality from colorectal cancer.

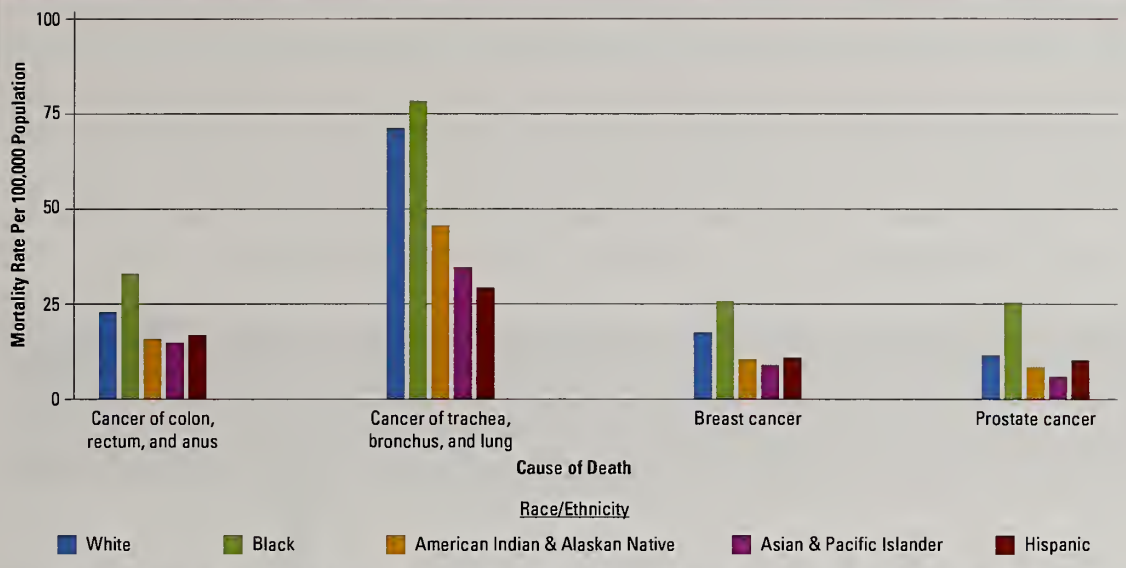
- Stomach cancer incidence and mortality have declined in the past 20 years and are lower for women than for men.[117] Blacks, Asians, Pacific Islanders, and Hispanics have stomach cancer mortality rates that are 1.5 times that of Whites.

- Cervical cancer mortality rates for Black women are more than that of White, American Indian and Alaskan Native, Asians, Pacific Islander women, and Hispanic women. As of 2005, cervical cancer screening rates had not reached the Healthy People 2010 target of increasing to 90 percent of the proportion of women aged 18 and older who have received a Pap test within the past three years.[118]

- African American and White women continue to have the highest mortality rates of uterine and ovarian cancer — 1.5 to two times that of the other races and ethnicities. Endometrial cancer is the most common type of uterine cancer and the most common cancer of the female reproductive system. The endometrial cancer mortality rate for African American women is nearly twice as high as that for White women — even though White women have a higher cancer incidence compared to Black women.[119]

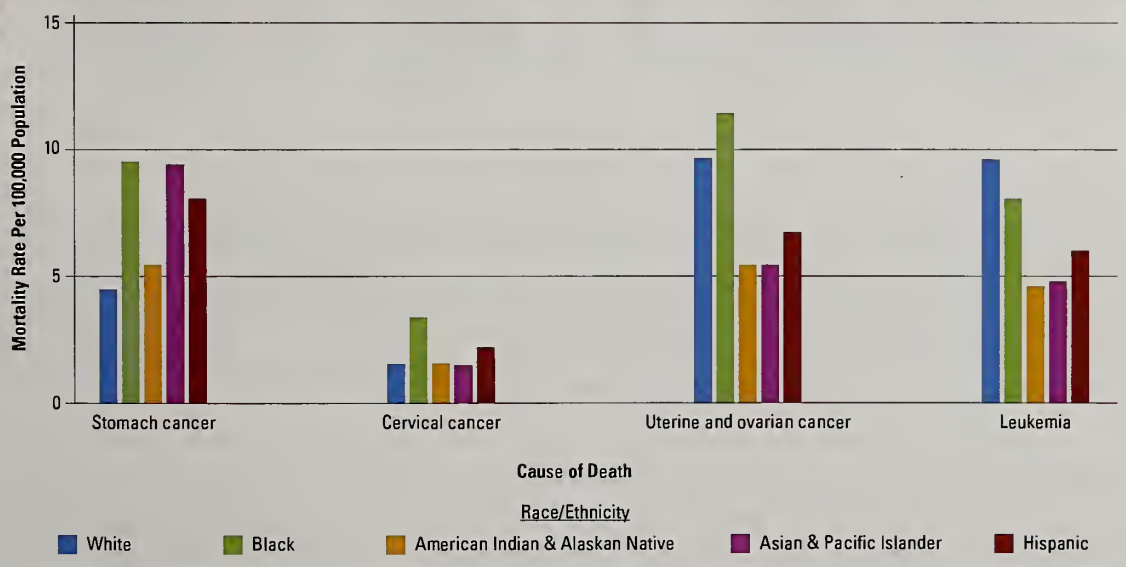
- Leukemia mortality since 1975 peaked in the early 1990s and has declined since then.[120] However, Whites and African Americans continue to have the highest mortality rates for leukemia.

Exhibit 2-12: United States Adult Mortality Rates for Common Cancers, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18+, US/state, 1999-2007 (source: NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for American Indian and Alaskan Native, Asian and Pacific Islander, and Hispanic populations may be underestimated.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Exhibit 2-13: United States Adult Mortality Rates for Other Cancers, 2005–2007

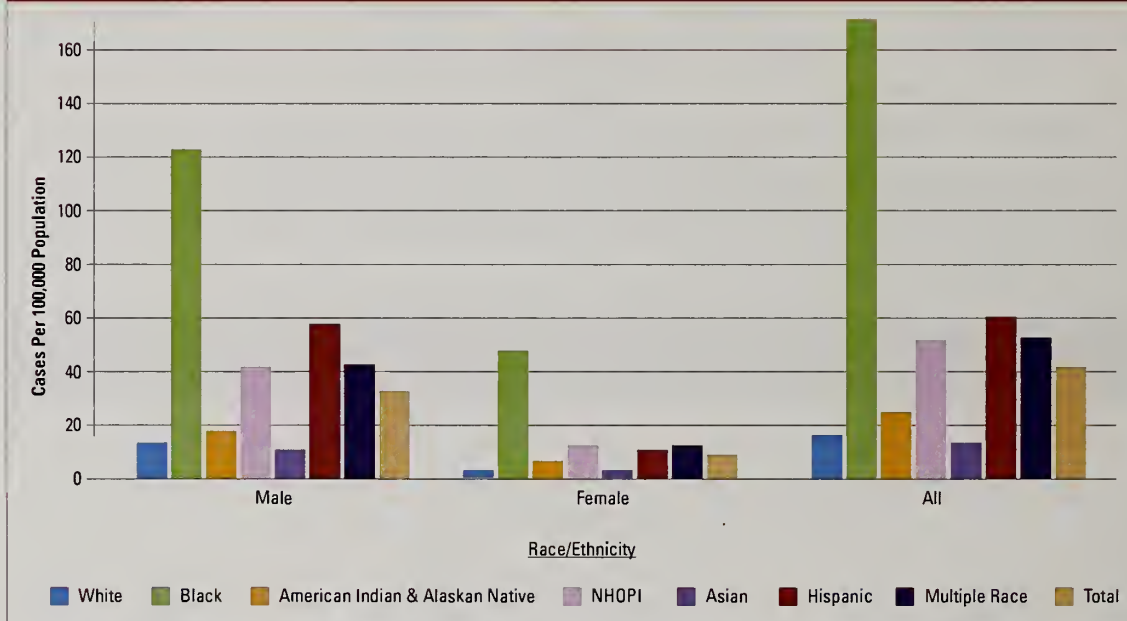


Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18+, US/state, 1999-2007 (source: NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for American Indian and Alaskan Native, Asian and Pacific Islander, and Hispanic populations may be underestimated.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

HIV/AIDS

The death rate for HIV/AIDS has declined significantly since its peak in 1995.[121] However, an estimated 1.1 million people in the United States were living with diagnosed or undiagnosed HIV/AIDS in 2007[122] (Exhibit 2-14). Men are far more likely to have HIV/AIDS than are women for all racial and ethnic populations. Men having sex with men (MSM) accounted for 53 percent of all diagnoses in 2007 and 71 percent of diagnoses among men.[122] African American adults and adolescents have the highest incidence of HIV/AIDS — nearly four times that of the general population and nine times that of Whites. In 2007, Native Hawaiian and Pacific Islander adults and adolescents had the second highest incidence of HIV/AIDS, followed by Hispanics.

Exhibit 2-14: HIV/AIDS Diagnoses Among U.S. Adults and Adolescents - 40 States, 2009



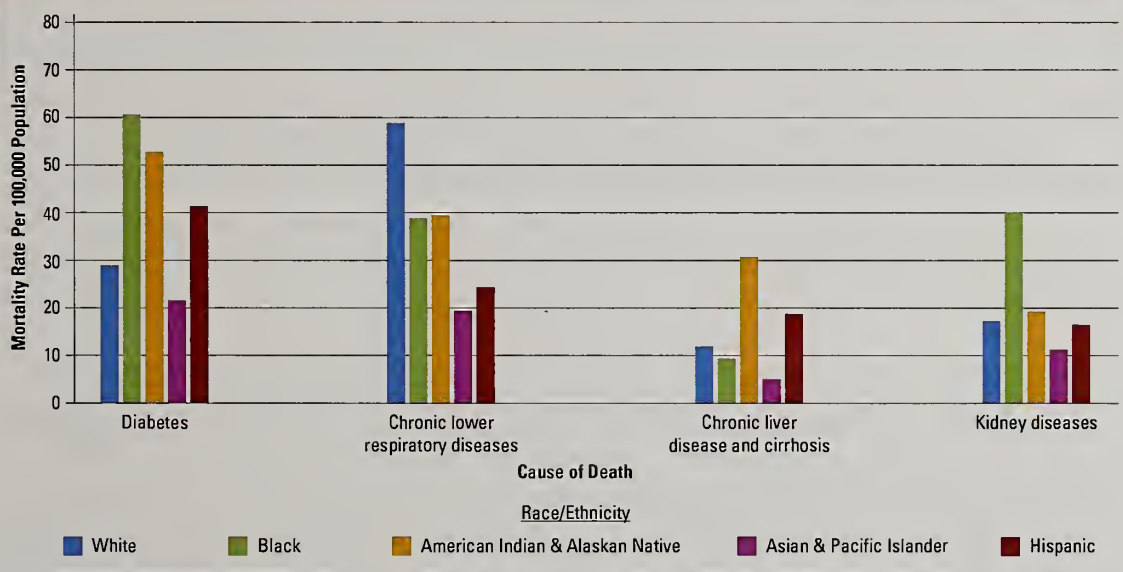
Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report, Volume 19. Section 1: Cases of HIV/AIDS, HIV incidence, and cases of AIDS. Table 3a: Diagnoses of HIV infection by race and ethnicity and selected characteristics, 2009—40 states with confidential name-based HIV infection reporting.
These numbers do not represent reported case counts but are estimates, which result from adjustments of reported case counts. The reported case counts have been adjusted for reporting delays, but not for incomplete reporting. Data include persons with a diagnosis of HIV infection (not AIDS), a diagnosis of HIV infection and a later diagnosis of AIDS, or concurrent diagnoses of HIV infection and AIDS.
AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander; All=includes persons of unknown race or multiple races.
www.cdc.gov/hiv/surveillance/resources/reports/2007report/index.htm Accessed March 21, 2011.

Compared to other groups, Blacks have more deaths and shorter survival rates for this disease than do other populations, and more Black children are living with HIV/AIDS.[123] The CDC indicates that barriers such as poverty, sexually transmitted diseases, and the stigma directed at those living with the disease contribute to HIV/AIDs for African Americans.[123]

Diabetes

The number of Americans with diabetes tripled from 1980 to 2006, and it is now the sixth leading cause of death in the United States. About 10 percent of the nation's adults ages 20 and older have diabetes, and 37 percent of those with diabetes are aged 65 and older.[124, 125] Racial and ethnic minorities are at high risk for diabetes. Given that overweight and obesity are risk factors for diabetes, it is important to note that body fat compositions vary among different racial and ethnic groups, and that standard body mass index (BMI) charts do not always accurately identify risk for diabetes. For example, in Asian Americans the risk of diabetes occurs at a lower BMI than in non-Asian Americans. For Pacific Islanders the opposite is true. Exhibit 2-15 shows that diabetes mortality rates for Blacks, American Indians and Alaskan Natives, as well as Hispanics, are higher than for Whites.

Exhibit 2-15: United States Adult Mortality Rates for Common Diseases, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18+, US/state, 1999-2007 (source: NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for American Indian and Alaskan Native, Asian and Pacific Islander, and Hispanic populations may be underestimated.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

Diabetes is also associated with low SES. For example, individuals who have less than a high school education or earn less than $15,000 per year are more likely to report having had a diagnosis of diabetes (Exhibit A-8 in Appendix A).

Data from the 2005 Indian Health Service (IHS) user population database indicates that 16.5 percent of the total adult population served by IHS has been diagnosed with diabetes. The rates vary by region with six percent among Alaskan Native adults to 29.3 percent among American Indian adults in southern Arizona.[126]

The National Institute of Diabetes and Digestive and Kidney Diseases at NIH provides guidance for individuals with diabetes who may also have hemoglobin variants, including sickle cell trait leading to sickle cell disease. Hemoglobin variants are more prevalent in people of African, Mediterranean, and Southeast Asian descent. In the United States, sickle cell disease is the most common inherited blood disorder, and it disproportionately affects the health of African Americans and Hispanic Americans. In persons with hemoglobin variants, some A1C tests can lead to false outcomes, resulting in misguided treatment of diabetes. An accurate A1C test reading is important for racial and ethnic minorities at increased risk of developing long-term diabetes complications.[127]

Chronic Lower-Respiratory Disease

Chronic lower-respiratory disease includes many conditions such as emphysema, chronic bronchitis, and asthma. It is the fourth leading cause of death in the United States, accounting for 5.1 percent of deaths in 2006.[121, 128] Whites have the highest mortality rate from this group of respiratory diseases (Exhibit 2-15). However, asthma, one of the particular chronic respiratory diseases, is a serious problem for racial and ethnic minorities and for those who are poorly educated or have lower incomes (Exhibit A-9 in Appendix A). The significant asthma disparities that are apparent for minority children are associated with poor air quality and other adverse environmental conditions. These disparities are discussed within the Environmental Determinants of Health subsection later in this section.

Viral Hepatitis

In the United States, approximately 15,000 people die each year from Hepatitis B- and C-associated liver disease. Hepatitis B and C disproportionately affect racial and ethnic minority populations. Approximately 5.3 million Americans are chronically infected with the Hepatitis B virus, the Hepatitis C virus, or both. In the United States, chronic viral hepatitis is the most common cause of chronic liver diseases, including cirrhosis and liver cancer. Asian Americans, Native Hawaiians and Pacific Islanders account for over half of the chronic Hepatitis B cases. In addition, African Americans, Hispanics/Latinos, and American Indians and Alaskan Natives have disproportionately high rates of Hepatitis B and Hepatitis C infections.[129, 130]

Chronic Liver Disease and Cirrhosis

Chronic liver disease and cirrhosis is the 12th leading cause of death in the United States.[121] Exhibit 2-15 shows that American Indians and Alaskan Natives had the highest mortality rate for chronic liver disease and cirrhosis. Hispanics die from chronic liver disease and cirrhosis more often than do Whites.

Kidney Disease

Approximately 20 million Americans have reduced kidney function and are at increased risk for kidney failure. Chronic kidney disease (CKD) is the ninth leading cause of death in the United States.[121] The leading causes of CKD include diabetes and high blood pressure. African Americans, American Indians and Alaskan Natives, and Hispanic Americans are at increased risk for CKD.[131] Exhibit 2-14 shows that Blacks had higher rates for kidney disease than other racial and ethnic groups. Morbidity among minority populations in all the stages of kidney disease reflects disparities in the burden of CKD and the co-morbidities that accompany it (e.g., diabetes and hypertension). The risk of cardiovascular events is higher in Hispanic versus non-Hispanic White adults with CKD.[132] Minority populations with CKD have more rapid progression to end-stage renal disease (ESRD), which results in the need for chronic dialysis treatments or a kidney transplant to survive.[133]

Notably, for African Americans and American Indians and Alaskan Natives, the ESRD incidence rate caused by diabetes increased in 2000 in contrast with a declining rate over that same period among Whites. The prevalent ESRD rate for Hispanic patients in 2007 was 1.5 times greater than the rate seen among non-Hispanics.[134]

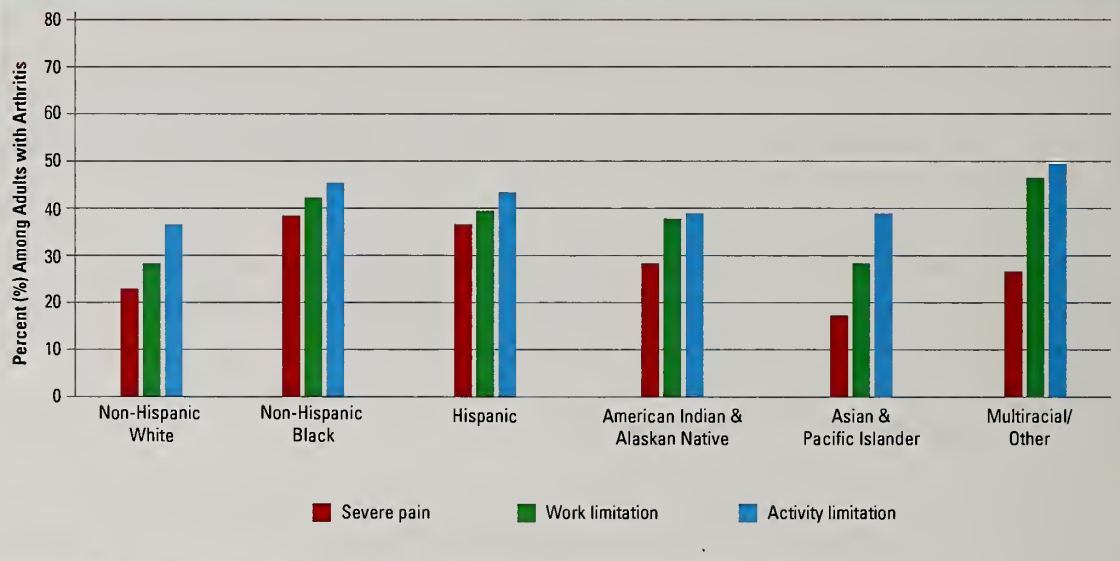
Black, American Indian and Alaskan Native patients with ESRD experience lower rates of referral to transplant centers and fewer completed transplant evaluations. Fewer Black, American Indian and Alaskan Native patients become kidney transplant candidates after medical or psychological screening than do White patients.[135] Once on the waiting list for a kidney transplant, African Americans have a median wait time of 4.7 years, compared to 2.2 years for Whites.[136]

Arthritis

Arthritis is the most common cause of disability in the United States [137, 138] and results in costs of $128 billion annually.[139] Approximately one in five adults in the United States (22.2 percent or 49.9 million) reported doctor-diagnosed arthritis; and 21.1 million adults (42.4 percent of those with arthritis) reported arthritis-attributable activity limitation.[140] With the aging of the U.S. population and the obesity epidemic, the prevalence of doctor-diagnosed arthritis and arthritis-attributable activity limitation is expected to increase significantly by 2030.[140] Age-adjusted arthritis prevalence is significantly higher among women (24.3 percent), those with less than a high school diploma (21.9 percent), persons who are obese (29.6 percent), persons who are physically inactive (23.5 percent), and current (23.7 percent) or former smokers (25.4 percent).[4] Arthritis interferes with work and daily activities and complicates the management of other chronic diseases such as heart disease and diabetes.[141, 142]

The prevalence of arthritis varies by race and ethnicity as follows: American Indians and Alaskan Natives (25.2 percent); non-Hispanic Whites (23.8 percent); multiracial/other (20.7 percent); non-Hispanic Blacks (19.4 percent), Hispanics (11.1 percent), and Asian Americans and Pacific Islanders (8.4 percent).[143, 144] Although the prevalence of arthritis is highest among American Indians and Alaskan Natives, and non-Hispanic Whites, the impact of arthritis is worse among non-Hispanic Blacks, American Indians and Alaskan Natives, multiracial individuals, and Hispanics compared to non-Hispanic Whites.[143, 144] As shown in Exhibit 2-16 arthritis-related severe pain, work limitation, and activity limitation are highest for these racial and ethnic minorities.

Exhibit 2-16: Arthritis Impact Among Racial and Ethnic Groups



Source: Bolen J, Schieb L, Hootman JM, et al. Prev Chronic Dis 2010; 7:1-5.

Arthritis and arthritis-attributable pain and limitation is a major public health problem in the United States and can be addressed in part by implementing obesity prevention strategies, and by improving the availability of effective physical activity and self-management programs.[145]

Pain Management — Disparities in pain management are not limited to arthritis pain. Growing evidence indicates that racial and ethnic minorities are disproportionately burdened by unrelieved pain through inadequate pain management. For example, White patients (31 percent) are prescribed opioid analgesics for emergency room pain management more frequently than are African American (23 percent), Hispanic (24 percent), or Asian and Pacific Islander (28 percent) patients.[146] These disparities may result from limited access to appropriate care; miscommunication between patient and providers; or providers' misperceptions about the presence, severity, or tolerance of pain among minority patients.[146, 147]

Pain assessment and management depend largely on trust and communication between the patient and healthcare professionals, and should be a matter of concern and awareness, especially for healthcare interactions with racial and ethnic minority patients.

Injury Deaths

Unintentional injuries (e.g., falls, fires, drowning, poisoning, suffocation), homicide, and suicide are significant causes of death in the United States, especially for adolescents and young adults. They were the fifth, 11th, and 15th leading causes of death, respectively, in 2006 for all ages.[121] Traffic deaths, injuries, and violence, which have a disproportionate impact on young people and minorities, are frequently preventable through a combination of public education, legislation, highly visible law enforcement, and supportive programs.

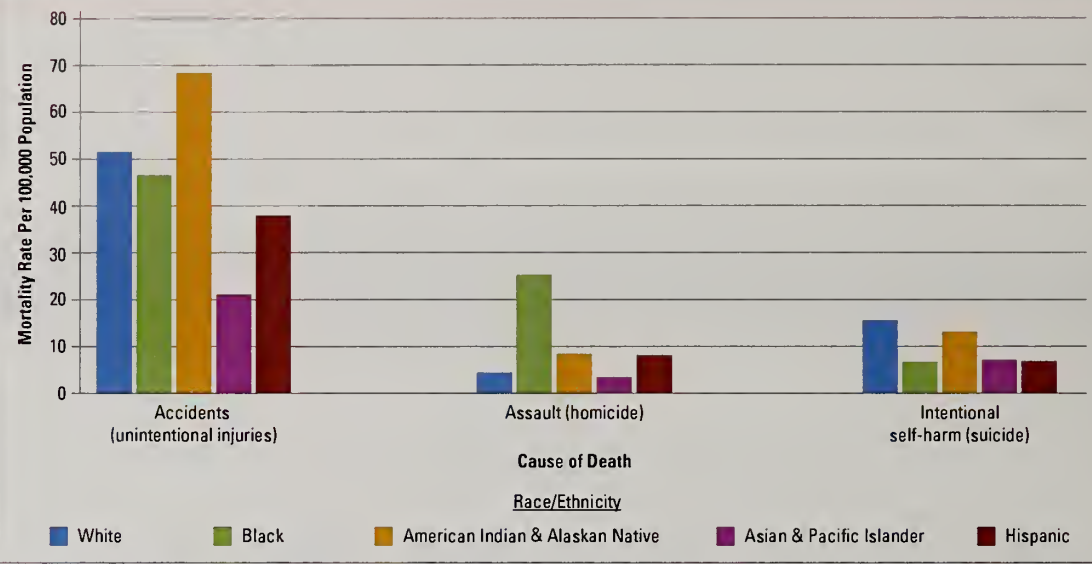
The following is a summary of the mortality rates for injury deaths:

- American Indian and Alaskan Native populations have the highest death rate from unintentional injuries of those populations shown in Exhibit 2-17. Unintentional injuries were the third leading cause of death for American Indians and Alaskan Natives of all ages in 2006. Motor vehicle deaths accounted for 49 percent of unintentional injuries for this population — nearly equal to all other causes of injury together. However, younger people of all races and Hispanics are especially at risk for unintentional injury. It is the number-one leading cause of death for individuals between one and 44 years of age.[148]

- Deaths from assaults or homicide are nearly six times higher for Blacks compared to Whites (Exhibit 2-17). For Hispanics, homicide is the second and third leading cause of death in age groups between ages five and 34. It is the second leading cause of death for American Indians and Alaskan Natives between the ages of one to 4.[148]

- Whites and American Indians and Alaskan Natives have the highest rates of suicide or intentional self-harm (Exhibit 2-17). Young people are particularly at risk for suicide in these populations. In 2006, suicide was the second leading cause of death for American Indians and Alaskan Natives in three age categories (10-14, 15-24, and 25-34 years), and the second leading cause of death for Asian and Pacific Islander youth ages 15-24. Suicide was also the second leading cause of death for Whites, ages 15-24 and 25-34. It was the third leading cause of death for Whites ages 10-14.[148]

Exhibit 2-17: United States Adult Mortality Rates for Other Causes of Death, 2005–2007



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Mortality and life expectancy. Mortality by underlying cause, ages 18+, US/state, 1999-2007 (source:NVSS). Data for 2005-2007 presented here. Data are age-adjusted for ages 18 and older. Data are based on death certificates. Death rates for American Indian and Alaskan Native, Asian and Pacific Islander, and Hispanic populations may be underestimated.
www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011

Violence

WHO defines violence as the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.[149] Violence can be interpersonal (e.g., domestic abuse, intimate partner violence [IPV], child abuse, crime), self-directed (e.g., suicide or self abuse), or collective (e.g. violence by political, militia, or terrorist groups). The nature of violence includes physical, sexual, or psychological violence, or deprivation and neglect.[149]

Violence is a risk factor for poor health and there is growing awareness of its contributions to health disparities. Estimates suggest that the cost of violence in the United States exceeds $70 billion each year, most of which is due to lost productivity (92 percent).[150] Apart from the obvious health dangers related to physical injury or trauma, chronic exposure to violence contributes to poor long-term physiological and psychological health outcomes.[151] For example, asthmatic children who experience high chronic exposure to violence also experience higher rates of asthma-related wheezing, sleep disruption, and interference with activity.[152] Psychological and behavioral problems associated with exposure to violence during childhood include poorer academic outcomes, post-traumatic stress disorder, depression, substance abuse, aggression, suicidal behavior, and risky behaviors.[153]

Available data indicates that disabled persons, women, children, the elderly, the homeless, and racial and ethnic minorities disproportionately experience exposure to violence. Youth ages 12 to 19 with a disability experienced violence at nearly twice the rate as those without a disability. Homicide is the leading cause of death for black men between the ages of 15 and 24. In 2007, the homicide death rate for this group was 18 times the rate for similarly aged white males.[b] Black females were four times more likely than White females to be murdered by a boyfriend or girlfriend. Among households with a female who experienced intimate partner violence during 2001 to 2005, 38 percent had children under age 12 living in the home. The best estimates indicate that between 1 and 2 million people, age 65 and older, have been injured, exploited, or otherwise mistreated by someone they depend on for care.

Trauma

Trauma includes physical, sexual, and institutional abuse; neglect; intergenerational trauma; and disasters that induce powerlessness, fear, recurrent hopelessness, and a constant state of alert. Trauma can result from experiences of violence. Trauma impacts one's relationships with self, others, communities, and environment, often resulting in recurring feelings of shame, guilt, rage, isolation, and disconnection.

Trauma in the form of chronic adversity is a particularly powerful force in determining life course trajectories among racial minorities and can shape pathways to substance abuse, mental illness, crime, incarceration, and neurobiological change. Social factors – such as high unemployment rates, poverty, and disproportionate incarceration among African American males (approximately five percent of the Black male population is incarcerated compared to less than one percent of Whites) – have an impact not only on the health of these males of color, but on the social fabric and economic vitality of their communities.[c]

Culturally competent trauma-informed care engages people with histories of trauma by recognizing the presence of trauma symptoms; acknowledging the role that trauma has played in individuals' lives; and promoting healing at the individual, family, and community levels. Trauma-informed organizations, programs, and services are based on an understanding of the vulnerabilities or triggers of trauma survivors that traditional service delivery approaches may exacerbate, so that these services and programs can be more supportive and avoid re-traumatization.

Behavioral Health

The cost of treating mental disorders in 2006 ($57 billion) was the fourth highest expenditure for medical conditions in the United States. The cost of mental health services also takes a significant financial toll on

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[b] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, WISQARS (Web-based Injury Statistics Query and Reporting System), www.cdc.gov/injury/wisqars (accessed February 18, 2011)

[c] Center for Nonviolence and Social Justice (2010). Report of the National Commission on the Impact of Trauma and Violence on the Health of African American Men. U.S. Department of Health and Human Services, Office of Minority Health.

individuals since 25 percent of expenditures are paid for out of pocket.[154] In 2008, the Substance Abuse and Mental Health Services Administration (SAMHSA) published a report showing that 10.9 percent of adults aged 18 or older experienced serious psychological distress in the past year. Of those adults, less than half received mental health services during the year, and young adults aged 18 to 25 were less likely than other adults to have received mental health services. In addition, African Americans were slightly less likely to receive prescription medication and outpatient services than were Whites.[155]

In 2005, more women experienced serious psychological distress than men, and more young adult women and men ages 18-25 had serious psychological distress in comparison to their counterparts ages 50 and older. Nearly twice as many American Indians and Alaskan Natives had serious psychological distress than did Whites, and more multiracial individuals experienced serious psychological distress than their single race counterparts for all age ranges (Exhibit 2-18).

Exhibit 2-18: United States Behavioral Health Indicators, 2009; Serious Psychological Distress in the Past Month

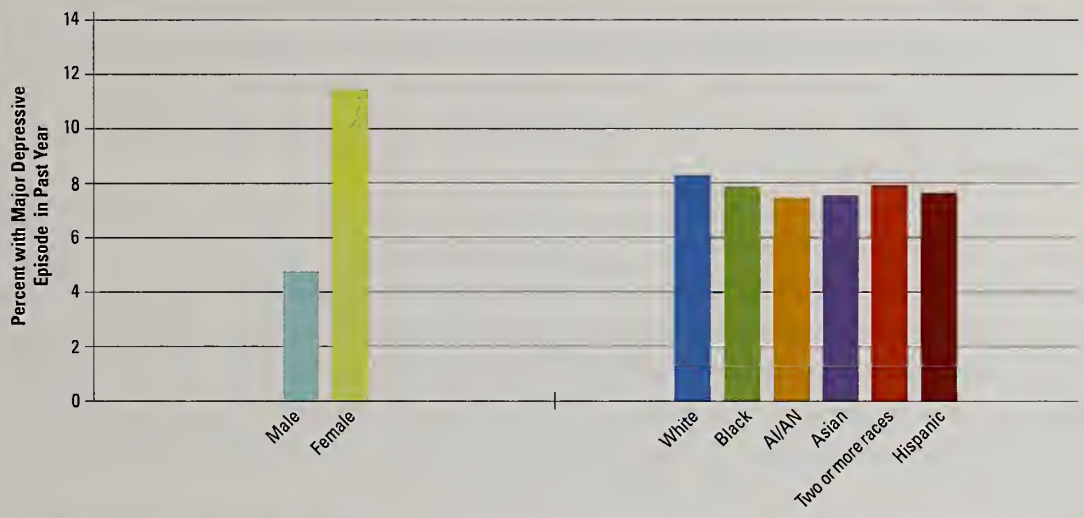
Category	Age-Group Percentages			
	Total	18–25	26–49	50 and older
Gender				
Male	*3.7*	6.3	4.2	2.1
Female	*5.4*	9.0	6.2	3.5
Race/Ethnicity				
White	*4.7*	7.6	5.9	2.8
Black	*4.7*	7.9	5.1	2.6
AI/AN	*4.0*	9.4	3.8	*
NHOPI	*4.3*	*	*	*
Asian	7.9	6.8	1.6	*
Two or more races	*6.9*	7.2	7.2	6.3
Hispanic	*4.8*	7.3	3.8	4.9
Total	*4.6*	*7.6*	*5.2*	*2.9*

Source: Substance Abuse and Mental Health Administration. Office of Applied Studies. 2009 SAMHSA National Survey on Drug Use and Health. Adult mental health tables 1.1-1.53; Table 1.52B: Serious psychological distress in the past month among persons aged 18 or older, by age group and demographic characteristics; percentages, 2008 and 2009.
*=not available; AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander
http://oas.samhsa.gov/index.htm Accessed March 21, 2011.

Findings from the National Survey on Drug Use and Health (NSDUH) indicate that an annual average of 8.5 percent of youth aged 12 to 17 experienced at least one major depressive episode in the past year.[156] Adolescent females are more than twice as likely to have had a major depressive episode in the past year as adolescent males (Exhibit 2-17). In addition, significantly more multiple race adolescents followed by American Indian and Alaskan Native adolescents experienced a major depressive episode in the past year when compared to single-race White, Black, Asian, and Hispanic adolescents.

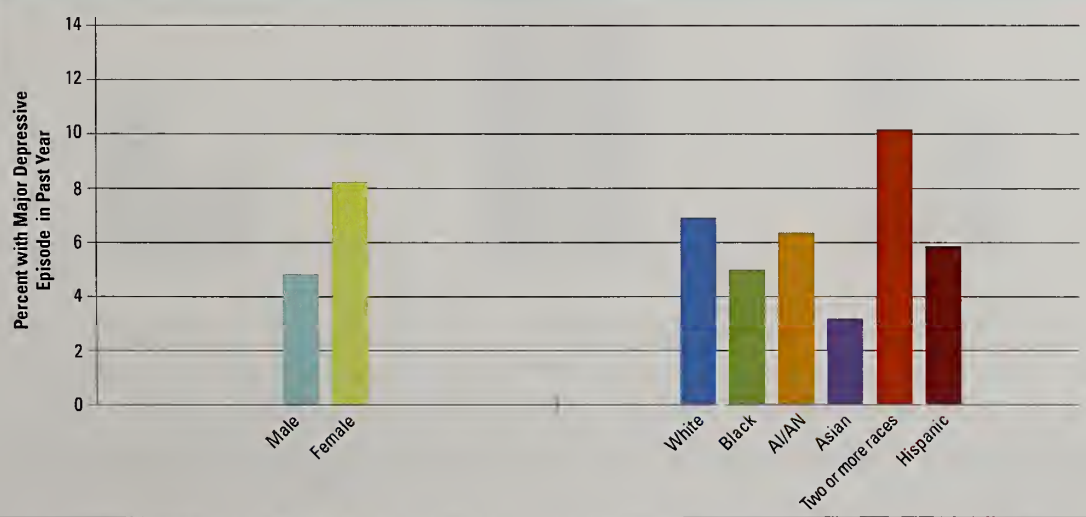
Similar to the findings for adolescents, adult females are more likely to have a depressive episode than males (Exhibit 2-19); multiple-race adults are more likely to have a depressive episode than are the other races and ethnicities shown.

Exhibit 2-19: Depression in Adolescents, Ages 12 – 17, United States, 2009



Source: Substance Abuse and Mental Health Services Administration; Office of Applied Studies. 2009 National Survey on Drug Use and Health, Mental Health Detailed Tables; Table 2.6B; Table 2.7B.
AI/AN=American Indian and Alaskan Native. Data available only for races and ethnicities shown.
http://www.oas.samhsa.gov/

Exhibit 2-20: Depression in Adults, 18 or older, United States, 2009



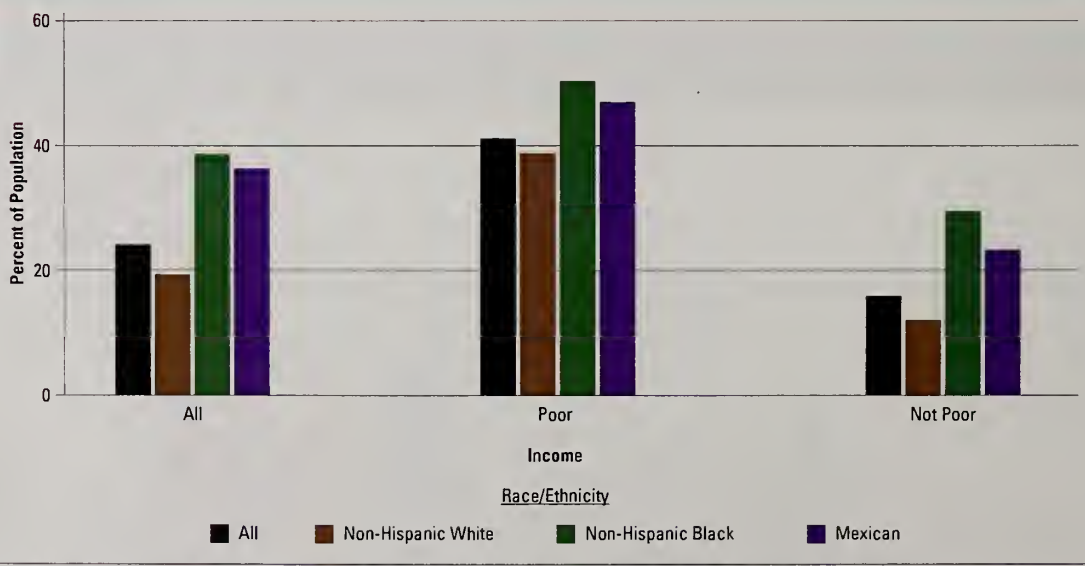
Source: Substance Abuse and Mental Health Services Administration; Office of Applied Studies. *2009* National Survey on Drug Use and Health, Mental Health Detailed Tables; Table 1.44B.
AI/AN = American Indian and Alaskan Native. Data available only for races and ethnicities shown.
http://www.oas.samhsa.gov/

Oral Health

Oral, dental, and craniofacial diseases and disorders are common problems for all populations. However, disparities in dental health among minority, low-income populations are often overlooked. Tooth decay is the most common chronic disease for children.[157] A 2010 report on the dental health challenges faced by children notes that only nine states meet the national goal of having no more than 21 percent of children with untreated tooth decay; that only 38.1 percent of low-income (i.e., Medicaid-enrolled) children received dental care in 2007 compared to 58 percent of privately insured children; and that minority and disabled children fare the worst for dental care.[158] For example, the percentage of untreated tooth decay for six-to-eight-year-old children varies greatly by race and ethnicity — with the worst decay in American Indians and Alaskan Natives (72 percent), compared to Mexican Americans (40.6 percent), Blacks (37.4 percent), and Whites (25 percent).

One measure of dental health — tooth decay — is linked to poverty as well as race. (Exhibit 2-21) The percentage of tooth decay in those individuals who are poor is two to three times that of the non-poor. Poor non-Hispanic Blacks and Mexican-Americans have slightly higher levels of tooth decay than poor non-Hispanic Whites. Non-poor Mexican Americans and Non-Hispanic Blacks and have about two times more untreated tooth decay than do non-Hispanic Whites. Similarly, dental health care (Exhibit A-10 in Appendix A) is self-reported as being less available for minorities, the less educated, and those with low incomes.

Exhibit 2-21: Untreated Tooth Decay, United States, 2005–2008



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Health conditions.
Tooth decay, untreated: U.S., 1998-2008. Data for 2005-2008 presented here. Data available only for races and ethnicities shown. Data are age-adjusted for ages 20 and older.
Poverty status according to U.S. Census Bureau's "poverty income ratio" definitions.
Poor=less than 100% of the poverty threshold; Not poor=200% of the poverty threshold or greater.
http://www.cdc.gov/nchs/hdi.htm Accessed March 21, 2011.

DETERMINANTS OF HEALTH

The health disparities described above do not exist in a vacuum or develop randomly. They are the result of a host of interrelated factors that affect individuals across their lifespan, from birth to death. These factors, commonly called "determinants of health," influence the health and well-being of individuals and communities; together they interact to impact health.[3, 159] Understanding the determinants of health is critical for devising strong public policy and action that promote health equity and the elimination of health disparities.[159] The following subsections offer a discussion of the determinants of health under four broadly accepted categories: *social determinants*; *behavioral determinants*; *environmental determinants*; and *biologic and genetic determinants*.[159]

Social Determinants of Health

There is a powerful link between social factors, health, and health care.[3] Social and economic policies have a direct impact on the health and well-being of those who live, work, learn, and play under those policies. Gender, poverty, SES, employment, education, food security, housing, transportation, psychological stress, racism, the health system, and other social and economic policies also impact health. Achieving health equity will require addressing the health of all groups and the impacts of all relevant policies on health care.

Gender

The concept of gender refers to male and female roles and relationships, which are shaped by social, economic, political, cultural, and other factors — rather than simply by biology.[160] Gender inequalities can have a direct bearing on health and well-being — particularly wherever females traditionally have been or continue to be more disadvantaged than males in terms of poverty, SES, and other social measures. Disadvantages in these measures are often associated with disparities in health outcomes as discussed later in this section. A gender-focused approach to health examines how gender differences determine access to benefits and the way in which technology, information, resources, and health care are distributed.[161]

Poverty and Socioeconomic Status

Poverty and low SES are fundamental predictors of adverse health outcomes.[8, 162] Generally, differences in health outcomes or access to health care fall along the fault line of SES. Even though medical breakthroughs over the past 50 years have significantly improved health outcomes, it is still generally true that a health and healthcare gap exists among communities of differing SES in this country. Studies suggest that the increase in

the prevalence of health disparities can be associated with the growing gap in SES — with gains in health status occurring predominantly among those in higher socioeconomic groups.[163, 164]

The last decade witnessed a marked growth in the prevalence of low-income populations in this country with increases from 31.6 million in 2000 to 39.8 million in 2008.[165] The South had the highest percentage (14.3 percent) of individuals living in poverty (Exhibit A-11 in Appendix A). Pockets of high poverty (25-56 percent) exist in counties throughout the United States such as those along the Mississippi River (Exhibit A-11).

Whites are the majority population and they also represent the majority of the 39.8 million poor in America. The detrimental health outcomes experienced by economically disadvantaged Whites are analogous to those experienced by economically disadvantaged minorities.[166] As shown in Exhibits 2-22 and 2-23, minority populations are disproportionately represented in the ranks of poverty compared to Whites. Poverty levels were also higher for females, especially if they are sole household providers, compared to males. Those without a high school education are at least five times more likely to experience poverty than are those with a bachelor's degree or higher. In addition, persons with disabilities are almost twice as likely to be poor compared to persons without disabilities.

Exhibit 2-22: United States Poverty Levels by Gender, Race, Ethnicity, 2005–2009

	Less than 50 percent of the poverty level	Less than 100 percent of the poverty level	Less than 125 percent of the poverty level
Gender			
Male	5.2%	12.1%	16.2%
Female	6.4%	14.8%	19.5%
Race/Ethnicity			
White	4.8%	10.8%	14.6%
Black	11.8%	25.1%	31.5%
AI/AN	12.0%	25.9%	33.0%
Asian	5.0%	10.9%	14.4%
NHOPI	6.8%	16.0%	21.2%
Some other race	8.8%	22.7%	30.7%
Two or more races	7.7%	17.3%	22.5%
Hispanic	8.4%	21.9%	29.7%
All	*5.8%*	*13.5%*	*17.9%*

Source: U.S. Census Bureau. American FactFinder: People; Poverty. Characteristics of people at specified levels of poverty. Table S1703 (source: 2005-2009 Amercian Community Survey).
AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander
http://www.census.gov Accessed March 22, 2011.

Exhibit 2-23: United States Poverty Levels by Other Categories, 2005–2009			
	Less than 50 percent of the poverty level	Less than 100 percent of the poverty level	Less than 125 percent of the poverty level
Living Arrangement			
In married-couple family	1.8%	6.0%	9.1%
In female householder, no husband present households	15.1%	31.0%	38.3%
In other living arrangements	11.0%	22.8%	29.1%
Educational Attainment			
Less than high school graduate	8.6%	24.2%	32.9%
High school graduate (includes equivalency)	4.6%	11.6%	16.3%
Some college or associate's degree	3.4%	8.0%	11.1%
Bachelor's degree or higher	1.8%	3.7%	4.9%
Disability (2005-2007)*			
With any disability	7.7%	21.4%	28.9%
No disability	5.0%	11.2%	14.9%
All (2005-2009)	*5.8%*	*13.5%*	*17.9%*

Source: U.S. Census Bureau. American FactFinder. 2005-2007 American Community Survey and 2005-2009 Amercian Community Survey. Table S1703: United States, charateristics of people at specified levels of poverty in the past 12 months.
* The 2005-2007 percentages are the most recent available for poverty in relation to disability.
http://www.census.gov Accessed March 23, 2011.

Employment

As might be expected, poverty tracks with low employment levels. In 2006, 23.4 percent of those who lived below the poverty level were unemployed compared to 6.6 percent of the total population. There are racial and ethnic disparities in employment levels (Exhibit 2-24). Asians and Whites have the lowest levels of unemployment. Multiracial individuals, Blacks, and American Indians and Alaskan Natives have the highest levels of unemployment. Persons with disabilities also have greater levels of unemployment than the general population.

Lower educational attainment also correlates with high unemployment (Exhibit 2-23). Those without a high school degree are almost four times more likely to be unemployed than are those with a bachelor's degree or higher.

Among the employed, wage disparity still exists. African American and Hispanic households earned less than White households, even after controlling for level of education.[167] The gap is largest between White and African American men with advanced degrees where salaries for African American men are 67 percent that of Whites.[168] Closing the income gap would contribute to improvements in healthcare access for the populations affected.

Exhibit 2-24: United States Employment Status, 2005–2009		
Population Category	**Percent Employed**	**Percent Unemployed**
Race[a]		
White	60.6	6.1
Black	54.2	13.3
AI/AN	52.1	13.2
Asian	61.7	5.8
NHOPI	61.0	9.2
Some other race	63.1	8.9
Two or more races	57.8	11.1
Ethnicity[a]		
Hispanic	61.9	8.7
Non-Hispanic	60.5	5.9
Poverty Status[b] **(2005-2007)***		
Below poverty level in past 12 months	38.2	23.4
Disability Status[b] **(2005-2007)***		
With any disability	37.3	13.2
Educational Attainment[c]		
Less than high school graduate	54.4	11.0
High school graduate[d]	69.2	7.2
Some college or associate's degree	75.4	5.6
Bachelor's degree or higher	82.4	3.1
All[a] ***(2005-2009)***	***59.9***	***7.2***

Source: U.S. Census Bureau. American FactFinder. 2005-2007 American Community Survey and 2005-2009 American Community Survey. Table S2301: United States, employment status.
AI/AN=American Indian & Alaskan Native; NHOPI=Native Hawaiian and Other Pacific Islander.
[a] Population 18 years and over.
[b] Population 20 to 64 years.
[c] Population 25 to 64 years.
[d] Includes equivalency.
* The 2005-2007 percentages are the most recent available for disability and poverty in relation to employment.
AI/AN=American Indian & Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander
http://www.census.gov/ Accessed March 23, 2011.

Lack of employment may also contribute to diminished access to health care since the majority of individuals in the United States receive health insurance through their employer. However, employment-based health insurance has been decreasing and in 2008 slipped to 58.5 percent, down from 59.3 percent in 2007. Low-wage jobs, in particular, act as barriers to health because, in addition to financial limitations, these jobs offer limited employee benefits such as access to health insurance, human resource centers, and paid absences. In 2005, approximately 37 percent of low-income adults had employment-based health insurance and nearly 43 percent had no coverage. Only 33 percent of low-wage jobs provide paid sick leave compared to 81 percent of high-wage jobs, discouraging healthcare seeking among socioeconomically disadvantaged populations.[169, 170]

Educational Attainment

Education strongly impacts health both directly and through its effect on other socioeconomic indicators such as income.[171, 172] Low educational status is inextricably linked with poverty. Minority populations often have lower records of educational achievement, which in turn reduces earning power.

Between 1972 and 2006, the high school dropout rate was lowest for Whites and highest for Hispanics.[173] Educational attainment is linked to gender, race, and ethnicity (Exhibit 2-25). While men and women have similar levels of academic attainment, African Americans and Hispanics have lower academic attainment compared to Whites and some Asian subpopulations. The gap for African Americans and Hispanics widens at higher levels of academic experience.

Exhibit 2-25: United States Educational Attainment, 2007

Category	Percentage			
	High school graduate or more[a]	Some college or more	Bachelor's degree or more	Advanced degree
Gender				
Male	83.9	53.8	28.2	10.7
Female	85.0	54.8	26.7	9.6
Race/Ethnicity				
White	87.0	56.6	29.1	10.7
Black	80.1	45.8	17.3	5.8
Asian	85.8	68.0	49.5	19.6
Hispanic	60.6	32.4	12.5	3.9

Source: U.S. Census. People and Households. Data by subject, education, educational attainment, current population survey, CPS 2007. Table 1: Educational attainment in the United States: 2007.
Percentages represent attainment by race for persons ages 25 years and older. Race categories exclude persons of Hispanic ethnicity.
[a] Includes equivalency.
http://www.census.gov/population/www/socdemo/educ-attn.html

Asians, Native Hawaiians, and Pacific Islanders are often grouped together for data analysis, yet these populations and their component subpopulations often have distinct cultural and ethnic identities and may evidence very different health outcomes. Such differences become apparent only when data is analyzed at levels specific to each population and subpopulation. For example, for Asian Americans there exists the "model minority myth," which assumes high educational attainment among all Asian groups when in fact, educational attainment varies by Asian subgroups (Exhibit 2-26).

Exhibit 2-26: United States Educational Attainment - Asian Americans, Native Hawaiians and Pacific Islanders, 2006

Population	Percent Less Than High School	Percent High School Diploma (or equivalency)	Percent Some College or Associate's Degree	Percent Bachelor's Degree	Percent Graduate or Professional Degree
White	13.5	30.3	27.6	18.0	10.5
Asian	14.1	17.8	19.7	25.2	19.2
Native Hawaiian and Pacific Islander	13.5	38.5	31.4	11.8	4.8
Selected Subpopulations					
Asian Indian	10.0	11.9	10.9	31.8	35.5
Cambodian	35.3	28.7	22.3	11.0	2.6
Chinese	18.1	16.8	15.3	25.2	24.6
Hmong	39.7	24.3	23.9	10.4	2.2
Indonesian	4.7	20.7	27.5	32.9	14.1
Korean	8.7	20.5	18.8	34.4	17.5
Laotian	37.6	30.0	21.4	5.3	1.8
Pakistani	12.8	16.1	16.5	31.0	23.6
Taiwanese	4.6	8.3	11.1	31.5	43.9
Vietnamese	27.7	23.9	22.2	18.8	7.4
Chamorro/ Guamanian	19.4	34.1	30.0	11.1	5.3
Micronesian	18.5	36.4	23.9	10.6	4.6
Native Hawaiian	10.8	33.3	32.9	12.3	5.1
Polynesian	12.0	40.0	31.9	11.5	4.7
Samoan	16.5	42.8	28.5	8.5	3.7

Source: Asian American, Native Hawaiian and Pacific Islander Population Demographics - 2006 Data Asian & Pacific Islander American Health Forum. http://www.apiahf.org

In recent years, the wages of high school dropouts have declined, and the wage differential between high school graduates and dropouts has increased.[174] Low economic status, low educational status, and poor health outcomes generally track together. Improving educational outcomes is a key strategy for reducing health disparities.

In order to accurately measure the extent of low educational attainment or the effectiveness of interventions, it is necessary to have reliable measures of educational status. There is some disagreement regarding the best way to measure the high school graduation rate, which is a key marker of educational success. The "status completion rate" used by the U.S. Census (e.g., see Exhibit 2-25) and the National Center for Education Statistics includes completion of high school equivalency exams, such as the General Equivalency Diploma (GED). National Bureau of Economic Research (NBER)-affiliated researchers suggest that status completion rates overestimate U.S. graduation rates, underestimate disparities in graduation rates, and bias interpretation of changes over time.[174] Furthermore, evidence shows that individuals earning GEDs do no better than dropouts in the labor market.[174]

There clearly is a link between health status, poverty, and education, especially in relation to race and ethnicity (Exhibit 2-27). Self-identified health status dramatically improves and directly corresponds with educational status and income levels. Blacks, Hispanics, and multiracial individuals self identify as having poor health status in markedly greater proportion than do Whites or "other" populations.

Exhibit 2-27: Health Status, United States and Territories, 2009

Self-identified "fair or poor health" status

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*14.6*	*All*	*14.6*	*All*	*14.6*
White	12.3	Less than H.S.	34.2	Less than $15,000	36.7
Black	19.7	H.S. or G.E.D.	19.1	$15,000 – $24,999	26.5
Hispanic	20.3	Some post-H.S.	13.8	$25,000 – $34,999	17.7
Other	13.0	College graduate	6.6	$35,000 – $49,999	12.3
Multiracial	18.6			More than $50,000	6.1

Source: Centers for Disease Control and Prevention, Healthy Living. Data and Statistics. Behavioral Risk Factor Surveillance System. Prevalence and Trends Database. U.S., 2009, Health status by race, education, and income.
[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands. Data from subgroups may not include all entities.
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/ Accessed March 23, 2011.

"During challenging economic times, the pool of those in need of vital food assistance expands…we must ensure that individuals do not fall through the cracks and can access nutritional services with dignity and respect."

–Tom Vilsack, U.S. Secretary of Agriculture, 2009

Food Security

Adequate food intake is a fundamental human need for survival and a prerequisite for health and well-being.[175] Food security exists "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life," or when households have "access, at all times, to enough food for an active, healthy life for all household members."[176, 177]

In the United States, unlike other parts of the world, starvation is nearly non-existent; yet some families, especially the poor, struggle to maintain a steady diet of nutritious food. This latter scenario has been called food insecurity and is defined by the United States Department of Agriculture (USDA) as "a household-level economic and social condition of limited or uncertain access to adequate food."[178] Food insecurity is differentiated from hunger, which is defined as an "individual-level physiological condition that may result from food insecurity."[178] There are reports of low food security and very low food security.[178]

In November 2009, the USDA released its findings that food insecurity in the United States had reached its highest level since 1995, when the first national food security survey was conducted.[179] The USDA reported that in 2008, 14.6 percent of American households were food insecure and "unable to put food on the table at times during the year."[179] This represents 16.7 million children and 32.4 million adults living in 17.1 million households.[177] This level of food insecurity was up from that of the previous year's level of 11.1 percent.[177]

Health outcomes range in severity depending on the degree of food deprivation — from starvation and malnutrition to a host of less severe, yet serious consequences that result from food insecurity.[180] For example, food-insecure individuals may limit their purchases of necessary medications in order to buy food. Limitations and variability in food sources may adversely affect diabetic patients for whom dietary limitations and specifications are necessary for controlling the disease. Children who live in food-insecure homes are susceptible to the consequences of poor nutrition (e.g. stunted growth, cognitive disabilities, iodine and iron deficiencies). Paradoxically, food insecurity may foster overweight and obesity, especially in women, because fresh fruits and vegetables and low-calorie foods are too expensive to purchase. Further, variability in food supply may promote an unhealthy cycle of alternating underconsumption and overconsumption.[180]

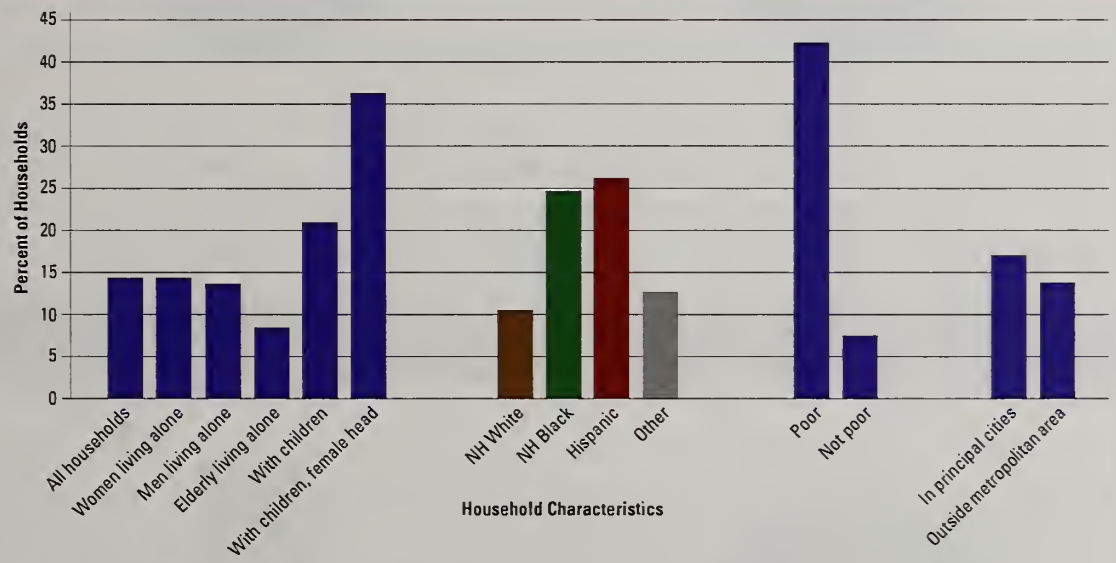
Food insecurity in the United States is highly associated with poverty and is more common in the South[177] and in cities (Exhibit 2-28). Disparities in food security exist for minorities. Households with children, especially when headed by a female without a spouse, have more than two-fold levels of food insecurity compared to all households. These same patterns of disparity exist for very low food-security households.[177]

WHO describes the following three pillars of food security:[176]

- Food availability — sufficient quantities of food available on a consistent basis
- Food access — having sufficient resources to obtain appropriate foods for a nutritious diet
- Food use — appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation

These three pillars serve as points of intervention to foster health equity through ensuring food security for all Americans.

Exhibit 2-28: Prevalence of Household Food Insecurity in the United States, 2009

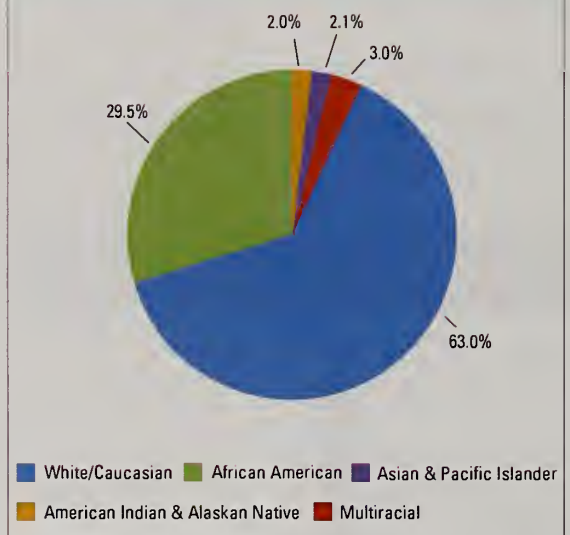


Source: U.S. Department of Agriculture. Economic Research Service. Briefing Rooms. Food Security in the U.S.: Key Statistics and Graphics. Prevalences of food insecurity by selected household characteristics, 2009.
NH = non-Hispanic; Poor = income-to-poverty level is less than 1.00; Not poor = income-to-poverty level 1.85 and over.
http://www.ers.usda.gov/Briefing/FoodSecurity/ Accessed March 23, 2011.

The USDA's Food and Nutrition Consumer Services (FNCS) is a significant part of the federal effort to reduce hunger and improve nutrition and health for all Americans. FNCS includes the Center for Nutrition Policy and Promotion (CNPP) and the Food and Nutrition Service (FNS), which represent key vehicles for promoting the health and well-being of poor, minority, and vulnerable populations. CNPP develops and promotes dietary guidance that links the best evidence-based scientific research to the nutrition needs of consumers. FNS administers 15 nutrition assistance programs for the nation in partnership with state agencies, including the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food

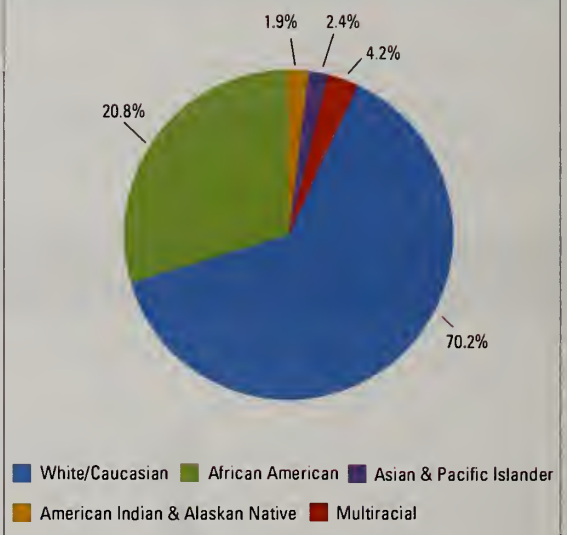
Stamp Program); the Special Supplemental Nutrition Program for Women Infants and Children (WIC); and the school meals programs including the School Breakfast and National School Lunch Program (NSLP). Additional information about those served by FNS programs is shown in Exhibits 2-29 through 2-32.

Exhibit 2-29: SNAP Participation by Race, 2008



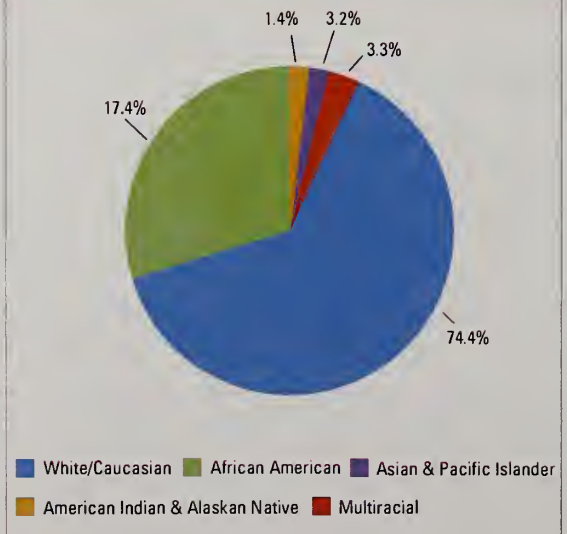
Source: U.S. Census Bureau, March 2009 Current Population Survey, Annual Social and Economic Supplement.

Exhibit 2-30: WIC Participation by Race, 2008



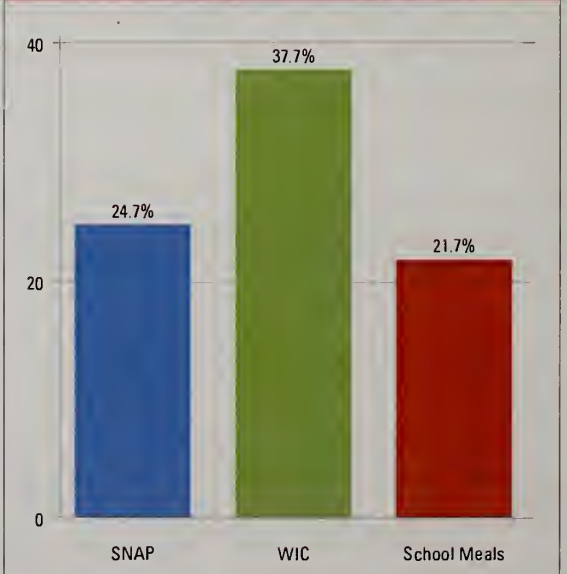
Source: U.S. Census Bureau, March 2009 Current Population Survey, Annual Social and Economic Supplement.

Exhibit 2-31: NSLP Participation by Race, 2008



Source: U.S. Census Bureau, March 2009 Current Population Survey, Annual Social and Economic Supplement.

Exhibit 2-32: Percentage of Program Participants That Are Hispanic/Latino, 2008



Source: U.S. Census Bureau, March 2009 Current Population Survey, Annual Social and Economic Supplement.

Housing and Transportation

Housing has been recognized as a prerequisite for good health.[181] Access to housing supports the basic human need for shelter and bears important implications for the health and well-being of families.[182] However, a number of housing-related factors can contribute to poor health or harm the health of individuals (e.g., housing affordability, quality, and stability).[183, 184] Low-income and underserved minority communities are often located in areas with high levels of air pollution, which is associated with triggers for asthma attacks and with health concerns such as heart disease and lung cancer.

Housing is the single largest household expense for individuals and families. Racial and ethnic minority populations spend a larger share of their household income on housing than the White population.[185] Lack of affordable housing limits choices about where families live and directly inhibits their ability to meet basic needs such as nutrition, clothing, and health care.[186] Housing costs can relegate families to live in disadvantaged neighborhoods that are characterized by substandard and unsafe housing, overcrowded neighborhoods with high poverty rates, and limited opportunities for healthy lifestyles.[187] Reports show that individuals who experience higher rates of chronic disease, are not engaged in the healthcare system, and are from racial, ethnic, and low-income communities are often the same populations that live in unsafe environments.[188]

The Robert Wood Johnson Foundation's Commission to Build a Healthier America issued a report on housing affordability and conditions within homes and surrounding neighborhoods that place individuals at greater risk for multiple health problems.[189] Examples of problems that impact health and safety include lead poisoning, which affects brain and nervous system development (e.g., lower intelligence and reading disabilities); residential overcrowding, which is linked to physical illness (e.g., tuberculosis) and psychological distress; and structural features of the home, which can lead to injuries and exposures that are detrimental to health.

High housing costs, poor housing quality, unstable neighborhoods, and overcrowding all contribute to housing instability.[190] Housing instability is a stressful life event that affects health directly and indirectly. Studies show that stable housing contributes to improved academic performance by children and to the socioeconomic stability of families. Stable environments also support care delivery to the elderly and to individuals with chronic illnesses and disabilities.

A review of the United States Department of Housing and Urban Development's (HUD) Public Housing Authority (PHA) and Office of Housing Programs (OHP) data (Exhibit 2-33) shows that the majority of assisted housing residents are White (51.7 percent and 60.4 percent, respectively). However, minorities are disproportionately represented in HUD housing. Households that have a female head or children have high participation in HUD housing (79.9 percent and 73.8 percent for female heads; 49.1 percent and 26.9 percent for homes with children), in contrast to homes with two adults (9.3 percent each for both HUD programs). Householders with disabilities also had high participation levels in HUD housing.

Improving health and safety cannot be accomplished without also addressing transportation. Much like housing, transportation affects health directly and indirectly — in addition to influencing access to affordable housing, transportation impacts access to healthy foods, health care and health-enabling services, educational opportunities, exercise facilities, and employment.[191, 192, 193]

Exhibit 2-33: U.S. Department of Housing and Urban Development (HUD): Assisted Housing, April 2007–September 2008

Demographic Indicators for Households	Assisted Households in Public Housing Authority Programs[a]	Assisted Households in Office of Housing Programs[b]
Reported Households[c]	2,779,073	1,402,146
Race/ethnicity (% of total)		
White	51.7%	60.4%
Black	44.1%	32.6%
AI/AN	0.8%	–
Asian	2.4%	–
NHOPI	0.4%	–
Multiple race	0.6%	–
Other race/ethnicity	–	5.0%
Missing data	–	2.0%
Total	*100%*	*100%*
Non-Hispanic	80.5%	87.2%
Hispanic	19.5%	12.8%
Total	*100%*	*100%*
Percent of Households:		
With female head	79.9%	73.8%
With male head	20.1%	26.2%
With two adults[d]	9.3%	9.3%
With disability[e]	36.8%	23.4%
With children[f]	49.1%	26.9%

Source: Data provided to OMH by HUD, 10/16/2009 and are for the 18-month period ending September 30, 2008. Data exclude all records that show head of household to be under 15 years of age or over 105 years of age, as well as any record showing type of action to be either "end of participation" or "portability move-out."

AI/AN =American Indian & Alaskan Native; NHOPI = Native Hawaiian/Pacific Islander.

[a] Data are from the Public and Indian Housing Information System (PIC). Includes all programs (public housing; moderate rehabilitation programs; and tenant-based vouchers, which also include a small number of Section 8 certificates).

[b] Data are from the Tenant Rental Assistance Certification System (TRACS). Includes all programs (Section 8 project-based; rent supplement; Rental Assistance Program; Below Market Interest Rate; Section 236; Section 202/8; Section 202/PRAC; Sec 811/PRAC.).

[c] Reflects the number of households with tenant data reports in either the PIC or TRACS system.

[d] Indicates if there is a head and either a spouse or co-head present.

[e] Reflects whether the head or a spouse (if any) or a co-head (if any) is disabled, regardless of age.

[f] Reflects households with at least one child under the age of 18.

http://www.hud.gov/offices/pih/systems/pic/

http://www.hud.gov/offices/hsg/mfh/trx/trxsum.cfm

Psychological Stress

Short-term or mild-acute psychological stress is a normal part of daily life. Although the relationship between stress and health is complex and not well understood,[194] it is generally accepted that psychological stress reduces the body's defense systems and increases the risk of developing unhealthy conditions, illness, or disease — at a minimum by encouraging unhealthy and/or risky behaviors such as overeating, smoking, violent actions, or alcohol and drug abuse.[194] It is well established that experiencing stress over a long period of time can weaken the body's immune system, thus compromising a key bodily mechanism for protecting against infection and disease.[194-198] Many other studies point to stress as a contributing factor in the development of psychological diseases such as depression; physical diseases such as heart disease or cancer; and unhealthy conditions such as obesity.[194, 199-202]

Everyone experiences stress and any individual might experience events that severely strain his or her capacity to cope — events such as job loss, financial crisis, abuse, long-term health issues, or death of a family member or friend. Nevertheless, some populations are particularly at risk for experiencing stressful situations in the long term. Persons living in poverty or with low SES, especially racial and ethnic minorities, often work and live in more stressful environments where they face economic strain, insecure employment, and perceived low control at work.[203] Racial and ethnic minorities may, in addition, experience discrimination, racism, or perceptions of racism. As discussed below, racism contributes to stress — with all the attendant adverse health outcomes.

Addressing health disparities warrants a closer examination of how stress acts as a social determinant of health inequities. Eliminating health disparities also requires the development of evidence-based strategies that help individuals and communities prevent, minimize, and cope with stressful situations.

Racism

A growing body of research conceptualizes racism as a chronic stressor in the lives of African Americans and other minorities.[204] Perceived racial discrimination is associated with poorer physical health outcomes among minorities.[58] Research suggests that experience of racial and ethnic discrimination may be associated with increased rates of cardiovascular disease, hypertension, respiratory problems, chronic conditions, and poorer perceived physical health.[64,65] Although there are differences among various Asian subgroups, perceived discrimination among Asian Americans correlates with increased mental distress (e.g., anxiety and depression),[205] heart disease, pain, and respiratory illnesses.[206] Recent research indicates similar findings for Black and Latino immigrants.[207] A clear understanding of the exact pathway by which racism shapes health is unknown.[63]

Various lines of research suggest that stress from gender and racial discrimination, and lack of adequate social networks and coping strategies may contribute to the relatively high rates of infant mortality for African Americans compared to other populations in the United States.[208, 209]

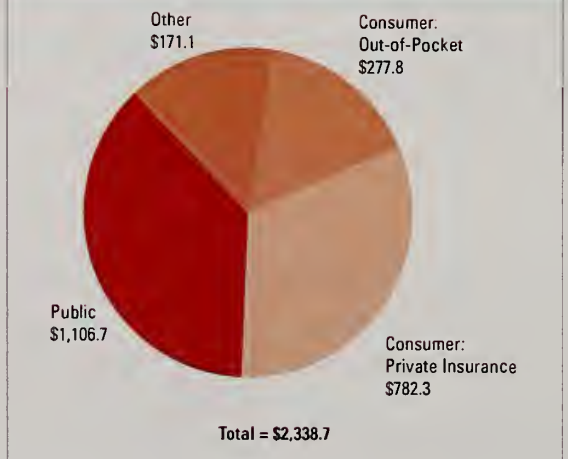
The Health System

A report developed for WHO's Commission on the Social Determinants of Health specified "the way health systems are designed, operated, and financed act as a powerful determinant of health."[210] Health systems were broadly defined to include "all actions whose primary purpose is to promote, restore, or maintain health."[211] These systems can promote prevention and have the potential to leverage, intervene, and act on the range of factors that influence health. With that said, efforts to improve health must consider determinants that exist not only outside, but also within the health system.[211]

Health care in the United States is supported through many public and private systems. Multiple components within these systems influence access, quality, cost, and use of care as well as preventive services.

One example of a health system is TRICARE, which provides healthcare coverage for the Department of Defense's service members, dependents, and retirees. A recent study examined disparities in health status, access to care, satisfaction with care, and preventive care for TRICARE beneficiaries. The study found fewer racial and ethnic health disparities among TRICARE beneficiaries as compared to racial and ethnic minorities in the civilian population. While the study found that some disparities do exist, the fewer disparities for TRICARE beneficiaries could be attributable to equitable access to high-quality health care.[212] Another study on the military oral healthcare system found that the disparities that exist between Black and White civilians for untreated dental caries and dental visits were absent among enlisted individuals.[213]

Exhibit 2-34: United States Health Expenditures, 2008
(in billions of dollars)



Source: U.S. Census Bureau, Table 132, National health expenditures by object, 1990 to 2008, and Projection, 2009. Other includes non-patient revenues, privately funded construction, and industrial inplant.
http://www.census.gov/compendia/statab/2011/tables/11s0152.pdf

Cost, Access, and Quality — The United States spends more on health care than any other industrialized nation. While Americans have benefitted from many of these investments, the United States as a whole has the worst record (out of the 19 industrialized nations) in premature deaths.[214] In two decades, healthcare costs have more than tripled from $714 billion in 1990.[215] The United States spent more than $2 trillion in 2008 for health care (Exhibit 2-34). These expenditures remained approximately the same in 2008, representing 16.2 percent of the gross domestic product.[216]

Many of the conditions for which there are large expenditures disparately affect racial and ethnic minorities (Exhibit 2-35).

Exhibit 2-35: Expenditures for Selected Medical Conditions, United States, 2008

Conditions	*Total expenses (in millions)*	Percent distribution of total expenses by source of payment				
		Out-of-pocket	Private insurance[a]	Medicare	Medicaid	Other[b]
Heart conditions	*95,577*	5.6	33.7	42.6	11.2	6.9
Trauma-related disorders[c]	*74,291*	8.3	45.9	23.9	6.3	15.6
Cancer	*72,157*	6.6	47.8	31.4	6.8*	7.4
Mental disorders	*72,157*	17.0	30.6	19.1	25.5	7.8
COPD, asthma	*53,699*	14.8	38.4	26.2	15.5	5.1
Hypertension	*47,381*	19.6	27.6	32.5	10.9	9.4
Diabetes mellitus	*45,895*	18.9	32.5	30.8	10.8	7.0
Kidney disease	*45,895*	5.2	29.5	48.7	11.4	5.3
Infectious diseases	*16,202*	9.7	43.1	26.8	14.9	5.6
Gallbladder, pancreatic, and liver disease	*15,147*	9.7	57.6	16.9	13.9*	5.9*
Cerebrovascular disease	*18,835*	10.6	19.6	43.1	15.5	11.2

Source: Agency for Healthcare Research and Quality. Center for Financing, Access, and Cost Trends. Data and Surveys: Medical Expenditure Panel Survey. Health Care Costs/Expenditures. Data tables: Expenditures by medical condition. Table 4: Total expenses and percent distribution for selected conditions by source of payment: United States, 2008.

* Unreliable data COPD=chronic obstructive pulmonary disease

[a] Private insurance includes TRICARE (Armed Forces-related coverage).

[b] Other includes public programs such as Department of Veterans Affairs (except TRICARE); other federal sources (Indian Health Service, military treatment facilities, and other care provided by the federal government); other state and local sources; other public payments; Worker's Compensation; other unclassified sources (e.g., automobile, homeowner's, liability, and other miscellaneous or unknown sources); and other private insurance.

[c] Trauma-related disorders are clinical classification codes 225-236, 239, 240, 244. These include fractures, spinal cord injury, sprains, crushing injuries, wounds, contusions, burns.

http://www.meps.ahrq.gov/mepsweb/ Accessed March 23, 2011.

The contribution of healthcare disparities to the rising cost of health care is often unrecognized, as is the potential for reducing healthcare costs through reduction of health disparities. A recent study, *The Economic Burden of Health Inequalities in the United States*, issued by the Joint Center for Political and Economic Studies, provides insight to the costs associated with *not* eliminating health disparities (see Exhibit 2-36). Using data from the Medical Expenditure Panel Survey (MEPS), the study estimated direct and indirect costs for 2003 to 2006. Additionally the study used data from the *National Vital Statistics*

Report to estimate the number of deaths due to health disparities in each age group. The study concluded that "the combined costs of health inequalities and premature death in the United States were $1.24 trillion." Based on this study, the cost of health disparities will only continue to rise exponentially in the near future. Addressing health disparities is an obvious point of intervention that can provide both a financial and an ethical payoff.

Exhibit 2-36: Economic Burden of Health Inequities in the United States, 2003-2006

Combined costs of health inequalities and premature death	*$1.24 trillion*
Potential reduction in the indirect costs associated with illness and premature death if minority health inequalities were eliminated	*$1 trillion*
Potential reduction in direct medical care expenditures if minority health disparities were eliminated	*$229.4 billion*
Percent of excess direct medical care expenditures for African Americans, Asians, and Hispanics that were due to health inequalities	*30.6%*

Source. T. LaViest, D. Gaskin, and P. Richard, The Economic Burden of Health Inequalities in the United States, 2009. Findings of a commissioned report from the Joint Center for Political and Economic Studies.

Access to quality health care is an important dimension in achieving health equity.[210] Inadequate access to quality health care has adverse consequences, both on a personal and societal level, translating into years of life lost, decreased productivity, and increased burden of disease. The NHQR and the NHDR track a number of core measures of healthcare quality and access. Consistently, the results show large disparities by race, SES, and other factors.[89]

Despite the high levels of spending for health care, many Americans are disadvantaged because they are uninsured or underinsured. While access to quality health care alone will not eliminate health disparities, it is an important component for healthy living. A recent IOM report concluded that there is a compelling case for action to ensure that Americans have healthcare coverage. The report stressed that not only is insurance integral for better health but also that high rates of the uninsured have adverse effects on those who are insured.[217]

Compared to Whites, almost three times as many Hispanics and twice as many Blacks say that they have no health coverage (Exhibit 2-37). A Kaiser Family Foundation analysis of health coverage for Asian Americans, Native Hawaiians and Pacific Islanders, and subgroups revealed significant disparities compared to Whites.[218]

Exhibit 2-37: Healthcare Coverage, United States and Territories, 2009

Adults aged 18-64 who say they have NO kind of healthcare coverage

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*17.0*	*All*	*17.0*	*All*	*17.0*
White	13.6	Less than H.S.	37.7	Less than $15,000	40.0
Black	23.8	H.S. or G.E.D.	23.7	$15,000 – $24,999	38.8
Hispanic	35.9	Some post-H.S.	15.9	$25,000 – $34,999	25.9
Other	16.4	College graduate	6.6	$35,000 – $49,999	15.5
Multiracial	14.1			More than $50,000	4.9

Source: Centers for Disease Control and Prevention. Healthy Living. Data Statistics. Behavioral Risk Factor Surveillance System. Prevalence and Trends Database. U.S., 2008, Health care access/coverage by race, education, and income.
[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands. Data from subgroups may not include all entities.
Stool=blood stool test; S/C=sigmoidoscopy or colonoscopy.
H.S.=high school; G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/ Accessed March 23, 2011.

Additional information is provided in Appendix A on the geographic distribution of health insurance in the United States (Exhibit A-12 in Appendix) and on federal and private sources for health care and health research (Exhibits A-13 through A-19).

Insufficient attention has been paid to issues regarding the impact of health disparities on business performance.[219] The Bureau of Labor Statistics predicts that 41.5 percent of the U.S. workforce will be members of racial and ethnic minority groups within the next decade.[220] There are bottom-line costs associated with health disparities and work-related causes of health disparities (e.g., workplace injuries). The Integrated Business Benefits Institute estimates that the full cost of employee absences is more than four times that of the total medical payment. Absence-related costs are about 76 percent of net income when taking into account wage-replacement benefits and lost productivity from absences.[219] The literature also shows that the higher the number of health risks an employee has, the higher the number of excess claims for each risk, the higher the number of days absent, and the higher the percentage of worker's compensation claims filed.[221]

Often employers are not aware of health disparities and the adverse impact on their employees. Consequently, they miss the dual opportunity of improving worker health and reducing insurance and healthcare costs. The National Business Group on Health completed a member survey in 2008 to determine employer awareness of health disparities.[222] Employers were surveyed about diversity strategies, awareness of disparities as drivers of direct and indirect costs, and actions taken to improve employee health and reduce disparities. The following are the key findings of the survey:

- Little initiative has been taken to track disparities among employees.
- The majority of employers were unaware of disparities as a business issue.
- Only one-third of participants thought reducing disparities was an important or very important issue.
- Few employers have undertaken efforts to make employees aware of strategies they have implemented to reduce healthcare disparities.
- The potential for reducing disparities was not generally a criterion for selecting health plans.
- The top barrier to implementing a disparities-reduction program was lack of data identifying the problem.

Based on these findings, it is not surprising that employers are often neither equipped nor prepared to ensure that all employees receive information about their personal and family health and health care in ways that are culturally and linguistically appropriate. The time and money spent on ensuring employee health is a worthwhile investment. Healthier workers mean lower healthcare costs and healthier communities. Additionally, a healthy workforce leads to improved productivity as well as employee satisfaction and retention.[223]

End-of Life Care — A 2009 study of approximately 160,000 Medicare beneficiaries in the last six months of life found that costs were higher for minorities.[224] Costs for White patients averaged $20,166 in this period. By comparison, the average costs for Black and Hispanic patients were about 30 percent and nearly 60 percent higher, respectively. The higher costs reflect greater use of intensive, life-sustaining interventions at the end of life for these populations. African Americans are more likely than White patients to leave hospice at the end of life to pursue aggressive therapies that may prolong survival.[225] African Americans and Hispanics who live in predominantly minority neighborhoods are less likely to use hospice than are African Americans and Hispanics who live in predominantly White neighborhoods.[226] In general, racial and ethnic minorities use hospice services less often than Whites, regardless of socio-demographic and clinical characteristics.[227] The reasons for low usage of hospice by minorities are not well understood but may include social or cultural customs; lack of knowledge or misperceptions about hospice and palliative care; or limited resources or access related to hospice care.

Preventive Care — Improving prevention is central to improving America's health. Immunizations and screenings are effective prevention tools. Disparities in immunizations and colorectal cancer screenings exist for older Black, Hispanic, and multiracial adults, and for those with lower educational attainment and low SES (see Exhibits 2-38 and 2-39). In 2008, nearly 45 percent of adults aged 65 years or older who had not had a flu shot within the past year were Black and nearly 34 percent were Hispanic, compared to only 28 percent of older White adults. Similarly, 51 percent of Hispanics and 48 percent of Blacks had not had a pneumonia vaccination, compared to only 31 percent for Whites (Exhibit 2-38).

Exhibit 2-38: Immunization, Older Adults, United States and Territories, 2008

Adults aged 65+ who have NOT had a flu shot within the past year or have NEVER had a pneumonia vaccination

Race/Ethnicity			Education			Income		
Category	Percent[a]		Category	Percent[a]		Category	Percent[a]	
	Flu	Pneumonia		Flu	Pneumonia		Flu	Pneumonia
All	*29.1*	*33.1*	*All*	*29.1*	*33.1*	*All*	*29.1*	*33.1*
White	27.5	30.5	Less than H.S.	34.9	38.0	Less than $15,000	34.8	33.8
Black	44.9	47.5	H.S. or G.E.D.	30.1	32.2	$15,000 – $24,999	30.8	32.4
Hispanic	33.9	50.8	Some post-H.S.	26.6	29.7	$25,000 – $34,999	25.7	29.3
Other	21.4	29.5	College graduate	25.2	32.7	$35,000 – $49,999	26.2	31.2
Multiracial	28.1	37.7				More than $50,000	25.9	34.5

Source: Centers for Disease Control and Prevention. Healthy Living. Data Statistics. Behavioral Risk Factor Surveillance System. Prevalence and Trends Database. U.S., 2008, Immunization by race, education, and income.
[a] Median values. Data from 50 states, D.C., Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school; G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/ Accessed March 23, 2011.

Colorectal cancer is the third most common cancer and the third leading cause of cancer mortality in men and women.[116] Screening for colorectal cancer in individuals over age 50 is an important strategy for early detection of cancer. Nevertheless, disparities exist for colorectal cancer screening. In 2008, a high percentage of Hispanics age 50 or older and older adults with less than a high school education who earned less than $15,000 per year reported that they had not had a blood stool test within the previous two years (Exhibit 2-39).

Approximately 52 percent of Hispanics and 42 percent of Blacks age 50 or older said that they never had a sigmoidoscopy or colonoscopy compared to 36 percent of older White adults. Forty-eight percent of those who had not been screened had less than a high school degree and nearly 48 percent earned less than $15,000 a year (Exhibit 2-39).

Exhibit 2-39: Colorectal Cancer Screening, United States and Territories, 2008

Adults aged 50+ who have NOT had a blood stool test within the past two years or have NEVER had a sigmoidoscopy or colonoscopy

Race/Ethnicity			Education			Income		
Category	Percent[a]		Category	Percent[a]		Category	Percent[a]	
	Stool	S/C		Stool	S/C		Stool	S/C
All	*79.1*	*38.2*	*All*	*79.1*	*38.2*	*All*	*79.1*	*38.2*
White	78.7	36.0	Less than H.S.	82.6	48.0	Less than $15,000	82.2	47.9
Black	76.4	42.0	H.S. or G.E.D.	79.5	41.4	$15,000 – $24,999	78.1	43.9
Hispanic	86.9	51.8	Some post-H.S.	78.8	38.0	$25,000 – $34,999	78.5	38.7
Other	85.0	52.5	College graduate	78.5	31.1	$35,000 – $49,999	78.2	37.4
Multiracial	77.8	42.8				More than $50,000	80.0	34.3

Source: Centers for Disease Control and Prevention. Healthy Living. Data Statistics. Behavioral Risk Factor Surveillance System. Prevalence and Trends Database. U.S., 2008, Colorectal screening by race, education, and income.
[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands. Data from subgroups may not include all entities.
Stool=blood stool test; S/C=sigmoidoscopy or colonoscopy.
H.S.=high school; G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/ Accessed March 23, 2011.

Behavioral Determinants of Health

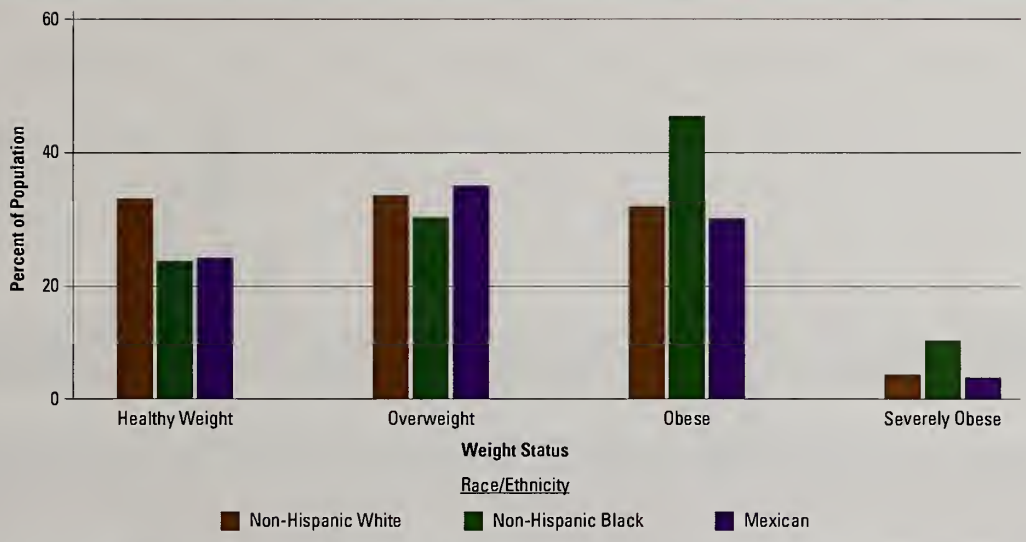
It is almost universally accepted that diseases arise as the result of a chain of events. Somewhere among the intermediate links in the causal chain lie human behaviors (also called "health behaviors") that can directly influence the risk of disease. Health behaviors often associate with or affect populations in different ways, significantly contributing to the emergence of health disparities. Since health behaviors are among the few modifiable risk factors that exist for some diseases, a thorough understanding of their epidemiological, ethnographic, and socioeconomic underpinnings is critically important for closing persistent gaps in health and healthcare status. Health behaviors seldom occur in isolation; instead, they combine into clusters that influence a person or group's overall risk of disease. For example, the sedentary lifestyle of a growing number of people comprises a more-or-less consistent set of mutually interacting behaviors, such as engaging in little exercise, eating foods of poor nutritional value, consuming high caloric drinks, and perhaps also smoking cigarettes or experimenting with other addictive substances. While these aggregated factors may not inevitably cause disease, they will elevate the risk of becoming obese and/or of suffering high blood pressure, cardiovascular disease, and addiction.

It is often difficult for individuals to make positive, long-term changes to reverse unhealthy behaviors, even though such changes can have a substantial payoff in improved health outcomes. A key component of prevention includes intervention strategies to help individuals avoid or modify unhealthy behavioral determinants. The following discussion highlights some of the most common behavioral determinants of health.

Overweight and Obesity

The CDC indicates "overweight and obesity are both labels for ranges of weight that are greater than what is generally considered healthy for a given height."[228] For adults, overweight and obesity ranges are determined by using weight and height to calculate BMI. An adult who has a BMI between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese. While BMI generally correlates with body fat, it does not measure body fat. Thus some individuals, such as athletes, may have a high BMI because of muscle weight, but do not have excess body fat and are not considered overweight or obese.[228] It is estimated that nearly 34 percent of individuals 20 years and older in the United States are obese, 34 percent are overweight (but not obese). Close to one in five adolescents (ages 12–19) is overweight.[229] A number of factors influence weight (e.g., behavior, genetics, environment). Being overweight or obese places people at risk for many conditions (e.g., heart disease, diabetes, arthritis, high blood pressure, certain cancers, and strokes). In addition, these conditions evidence disparities for racial and ethnic minorities and other groups. Non-Hispanic Blacks have the highest rates of obesity and severe obesity, followed by Mexican Americans. Non-Hispanic Whites have the highest rates of healthy weight (Exhibit 2-40).

Exhibit 2-40: Overweight and Obesity by Race and Ethnicity, United States, 2005–2008



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. Risk factors and disease prevention. Overweight/obesity: U.S., 1998-2008 (source: NVSS). Data for 2005-2008 presented here. Data available only for races and ethnicity shown. Data are age-adjusted for ages 20 and older. Data are for measured body mass index (BMI). Healthy weight=BMI 18.5 to less than 25.0; overweight=BMI 25.0 to less than 30.0; obese=BMI greater than or equal to 30.0; severely obese=BMI greater than or equal to 40.0. http://www.cdc.gov/nchs/hdi.htm Accessed March 24, 2011.

Overweight and obesity are usually related to an individual's patterns of exercise and food intake — two components that are valuable points of intervention for controlling weight. It is particularly vital that children have supervised, vigorous physical activity and nutritious foods at school and home. The rate of childhood and adolescent obesity has doubled or tripled since the late 1970's. Comparing the period 1976-1980 to the period 2007-2008, the obesity rate rose from 5 percent to 10.4 percent for preschoolers ages two to five years; from 6.5 percent to 19.6 percent among six-to-11 year olds; and from 5 percent to 18.1 percent among adolescents ages 12-19.[230] Childhood obesity has been associated with a myriad of acute and chronic health conditions including psychological stress, high cholesterol, high blood pressure, asthma, heart disease, and diabetes.[230] The estimated direct cost of childhood obesity is at billions of dollars annually.[223]

Exercise

Race, ethnicity, low education levels, and low income are related to low participation in physical exercise (see Exhibit 2-41). Approximately 32 percent of Hispanics and 32 percent of Blacks self reported that they did not participate in physical activities during the past month compared to about 23 percent of Whites. Further, nearly 42 percent of individuals who earned less than a high school degree self reported that they did not participate in any physical activity during the past month compared to approximately 15 percent of college graduates. There was also a directly proportional relationship between physical activity and income. Individuals earning less than $15,000 a year reported less participation in physical activity during the past month than those earning more than $50,000

Exhibit 2-41: Exercise by Race, Ethnicity, Education, and Income, United States and Territories, 2008

Persons who did NOT participate in any physical activities during the past month

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*24.8*	*All*	*24.8*	*All*	*24.8*
White	22.6	Less than H.S.	41.9	Less than $15,000	41.7
Black	31.6	H.S. or G.E.D.	32.2	$15,000 – $24,999	36.1
Hispanic	32.3	Some post-H.S.	23.8	$25,000 – $34,999	31.4
Other	25.8	College graduate	14.8	$35,000 – $49,999	25.6
Multiracial	18.8			More than $50,000	16.8

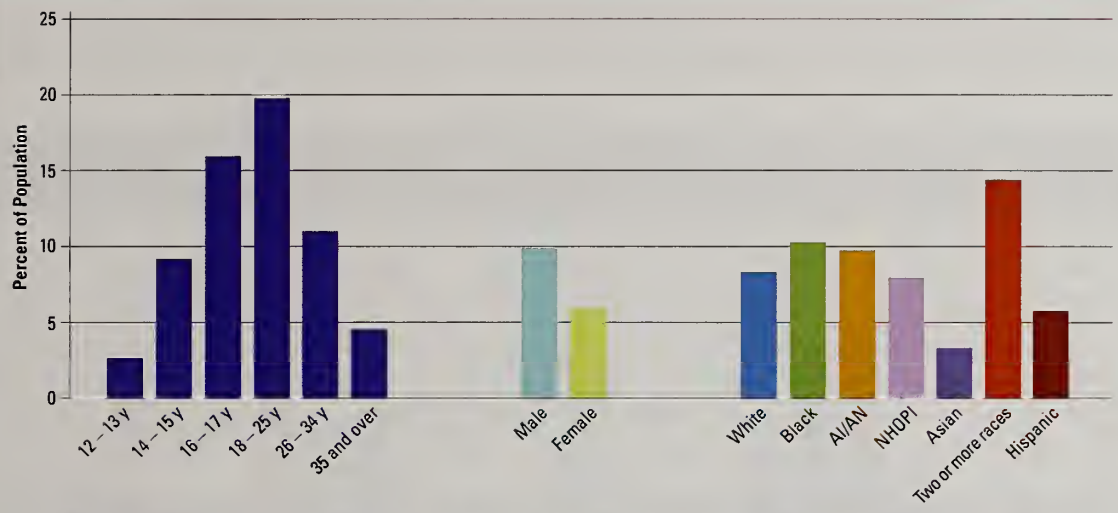
Source: Centers for Disease Control and Prevention. Healthy Living. Data and Statistics. Behavioral Risk Factor Surveillance System. Prevalence and Trends Database. United States, 2009, Exercise by race, education, and income.
[a] Median values. Data from 50 states, D.C., Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/index.htm Accessed March 24, 2011.

Illicit Drugs, Tobacco, and Alcohol

Use of illicit drugs, use of tobacco, and abuse of alcohol are linked to adverse health outcomes including disease, violence, and unintentional death. As discussed below, these substances are more likely used by younger individuals, males, and some racial and ethnic groups.

Illicit Drugs — An estimated 20.1 million Americans (8 percent), age 12 years and older used an illicit drug in the past month, as surveyed in 2008, with marijuana leading the way as the most commonly used drug.[232] Illicit drug use in the United States is most common among males, individuals 18-25 years of age, and American Indians and Alaskan Natives (Exhibit 2-42). Drug use increases steadily from age 12-13, peaks at 18-25 years of age, followed by declines in usage.

Exhibit 2-42: Illicit Drug Use by Age, Gender, Race, and Hispanic Origin, United States, 2008



Source: Centers for Disease Control and Prevention. National Center for Health and Statistics. Publications and Information Products. Health, United States, 2010. Table 61: Use of selected substances [illicit drug use] in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002-2008. Data for 2008 presented here. Data are based on household interviews of a sample of civilian non-institutionalized population 12 years of age and over.
Includes use of any illicit drug in the past month, including marijuana or hashish, cocaine (including crack), heroin, hallucinogens (including LSD and PCP), inhalants, or any prescription-type psychotherapeutic drug used non-medically.
AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander.
http://www.cdc.gov/nchs/data/hus/hus10.pdf

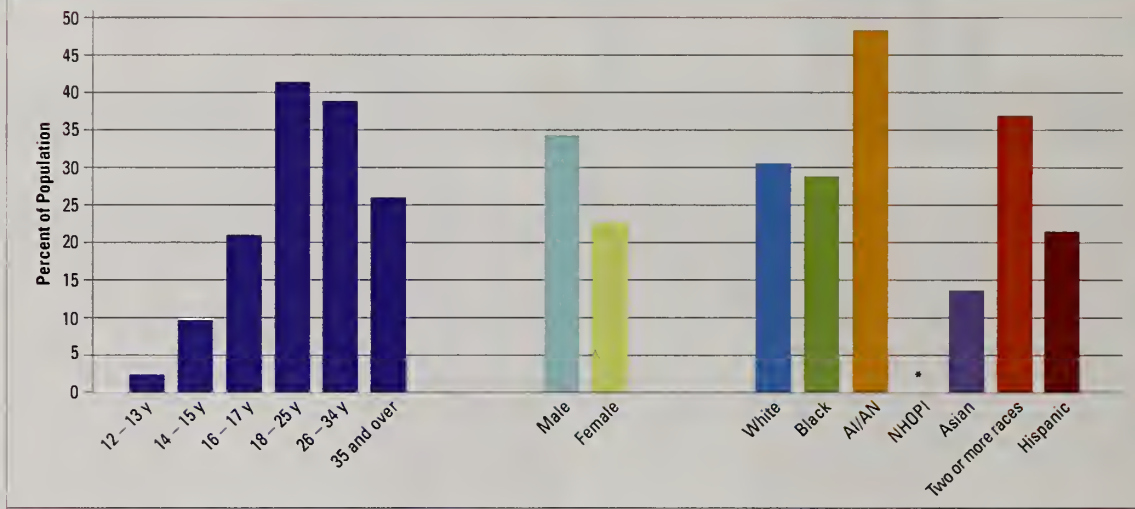
Marijuana use by adolescents has declined since the 1990s, but that decline has leveled off. Adolescent use of methamphetamine, cocaine, and hallucinogens continues to decline.[233] However, adolescent abuse of prescription drugs (e.g., pain medications like OxyContin and Vicodin) continues to increase.[233]

Tobacco — An estimated 46 million adults in the United States currently smoke cigarettes.[234] Cigarette smoking is the leading preventable cause of disease and death in this country accounting for one in five deaths annually or about 443,000 deaths per year. Deaths related to tobacco usage are more numerous than all deaths combined due to HIV, illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders.[235] Smoking has many adverse health effects including increased risks of cancer, heart disease, stroke, respiratory diseases, infertility, low birthweight, and SIDS.[235]

According to 2006 NSDUH data (Exhibit 2-43), tobacco use peaks at ages 18-25, is more common in males than females, and is highest among American Indians and Alaskan Natives, and multiracial individuals (data is not reliable for Native Hawaiians and Pacific Islanders in this data set). An earlier Surgeon General's study of tobacco use among racial and ethnic minorities highlights some of the social and cultural aspects of smoking among minority populations.[236] The report notes that "no single factor determines

patterns of tobacco use among racial and ethnic minority groups; these patterns are the result of complex interactions of multiple factors, such as SES, cultural characteristics, acculturation, stress, biological elements, targeted advertising, price of tobacco products, and varying capacities of communities to mount effective tobacco control initiatives." The report also points to the deleterious effects of the tobacco industry's targeted advertising of its products to minority communities.

Exhibit 2-43: Tobacco Use by Age, Gender, Race, and Hispanic Origin, United States, 2008



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Publications and Information Products. Health, United States, 2010. Table 61: Use of selected substances [tobacco use] in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002-2008. Data for 2008 presented here. Data are based on household interviews of a sample of civilian non-institutionalized population 12 years of age and over.
Includes use of any tobacco products in the past month, including cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco.
*=unreliable data AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander.
http://www.cdc.gov/nchs/data/hus/hus10.pdf Accessed March 25, 2011.

Such advertising can significantly undermine smoking control and prevention efforts in minority communities — resulting in poor health outcomes directly related to tobacco use. On September 22, 2009, Congress authorized the new Family Smoking and Tobacco Control Act, which bans the sale of flavored cigarettes. This act aims to reduce the number of children who start and/or continue to smoke because of the marketing and availability of this type of cigarette, which might be particularly attractive to young people.[237]

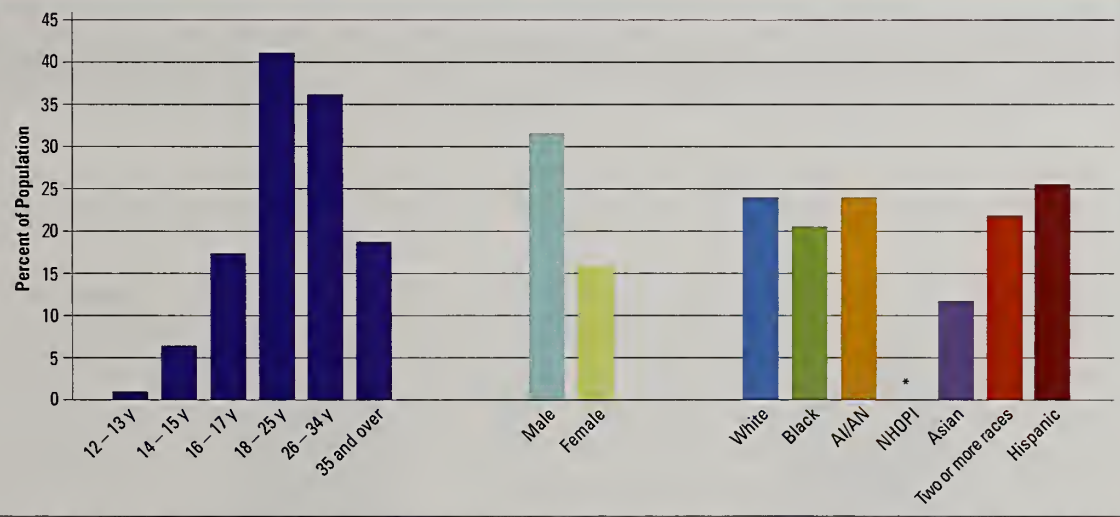
Significant geographic tobacco-related disparities exist in the South and Midwest. These regions generally have fewer smoke-free protections, lower tobacco taxes, and limited tobacco-control funding. In addition, higher rates of cigarette use are seen in nonmetropolitan areas compared to metropolitan areas.[238]

Secondhand smoke continues to be a hazard and its elimination is an ongoing goal of legislative and social action. Cigarette smoking increases the incidence of morbidity and mortality in both users and non-users of

this product. More than 126 million non-smokers are regularly exposed to secondhand smoke. Homes and workplaces are primary locations for secondhand smoke, with almost 60 percent of young children (ages three-to-11 years) exposed to this noxious environment. In addition to children, secondhand smoke exposure tends to be higher among persons of lower incomes and African Americans.[239] An estimated 49,000 of tobacco-related deaths are the result of secondhand smoke exposure.[240]

Alcohol — Excessive alcohol use (i.e., excessive drinking or binge alcohol use) increases the risk of unintentional death, violence, risky sexual behaviors, alcohol poisoning, psychiatric problems, or diseases such as liver disease.[242] Abuse of alcohol is the third leading lifestyle-related cause of death in the United States.[242] Binge alcohol use is likewise more common in younger age groups (ages 18-34 years), in males, and in American Indians and Alaskan Natives (Exhibit 2-44). Driving while under the influence of alcohol and the resultant risk of traffic fatalities continue to be a concern for specific populations. In 2008, 12.4 percent of individuals age 12 or older reported driving under the influence of alcohol at least once in the past year — although this represents a decline from a rate of 14.2 percent in 2002.[227]

Exhibit 2-44: Binge Alcohol Use, by Age, Gender, Race, and Hispanic Origin, United States, 2008



Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Publications and Information Products. Health, United States, 2010. Table 61: Use of selected substances [binge alcohol use] in the past month among persons 12 years of age and over, by age, sex, race, and Hispanic origin: United States, 2002-2008. Data for 2008 presented here. Data are based on household interviews of a sample of civilian non-institutionalized population 12 years of age and over.
Binge alcohol use is defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days. Occasion is defined as at the same time or within a couple of hours of each other.
*=unreliable data AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander.
http://www.cdc.gov/nchs/data/hus/hus10.pdf Accessed March 25, 2011.

Environmental Determinants of Health

The physical environment plays a vital and primary role in health outcomes. To a great extent, the environment determines whether or not we are healthy — through access (or not) to clean air and water, healthy working conditions, and safe housing, roads, and communities.[243] WHO estimates that each year, 13 million deaths worldwide are due to preventable environmental causes. WHO argues that a quarter of all preventable illnesses can be avoided through proper environmental management.[244] Points of intervention include, for example, indoor and outdoor air pollution; chemical safety in the local environment; ionizing and ultraviolet radiation exposure; and water, sanitation, and hygiene facilities.[245]

Healthy People 2020 describes the physical environment as "that which can be seen, touched, heard, smelled, and tasted. However, the physical environment also contains less tangible elements, such as radiation. The physical environment can harm individual and community health, especially when individuals and communities are exposed to toxic substances; irritants; infectious agents; and physical hazards in homes, schools, and worksites. The physical environment also can promote good health, for example, by providing clean and safe places for people to work, exercise, and play."[43]

The environmental determinants of health are important contributors to health disparities. Several lines of evidence suggest that minority and low-income populations experience a higher burden for some exposures and diseases related to the physical environment as shown in the exhibits below. The United States Environmental Protection Agency (EPA) issued a key "environmental equity" report, which concluded that:[246]

- Racial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, contaminated fish, and agricultural pesticides in the workplace.

- There are clear differences between racial groups in terms of disease and death rates. There is also limited data to explain the environmental contribution to these differences. In fact, there is a general lack of data on environmental health effects by race and income. For diseases that are known to have environmental causes, data are not typically disaggregated by race and socioeconomic group. The notable exception is lead poisoning: a significantly higher percentage of Black children compared to White children have unacceptably high blood-lead levels.

- Great opportunities exist for EPA and other government agencies to improve communication about environmental problems with members of low-income and racial minority groups.

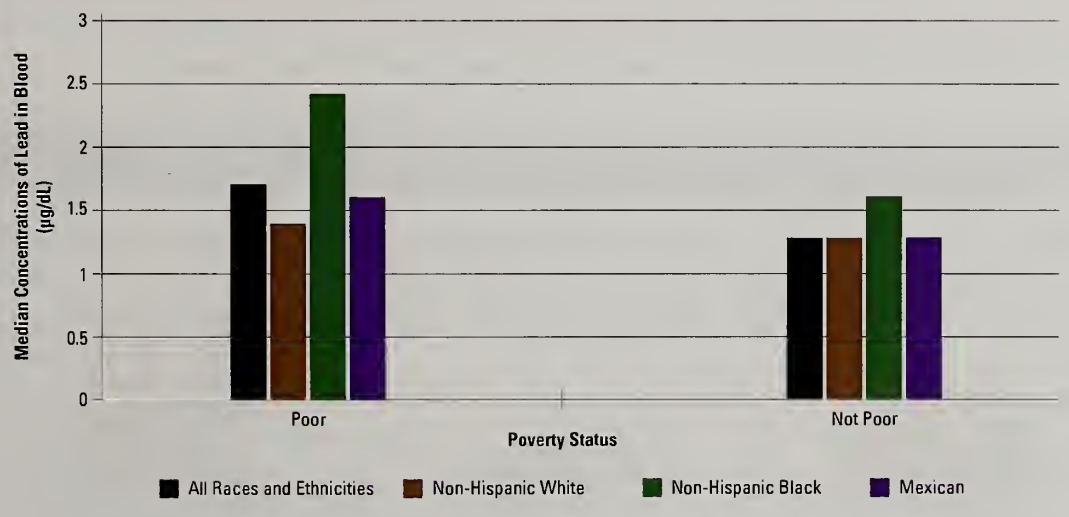
Geographic locations have varying constellations of environmental hazards. For example, some urban environments are characterized by poor air quality, crowded and unsafe housing (e.g. lead paint), limited access to fresh foods, safe places to play and exercise, and unsafe or violent neighborhoods. A high percentage of minorities reside in urban centers. Alternatively, those living in rural environments may be exposed to higher levels of hazardous waste (e.g., farm-related pesticides and petroleum products).[247, 248]

The following information provides a brief summary on blood-lead levels, asthma, and the workplace environment as they relate to environmental determinants of health.

Blood-Lead Levels

Bio-monitoring data highlights disparities in actual body burdens of environmental toxins. Lead is a neurotoxic metal and an environmental toxin that is clearly linked to disparities in exposure burden related to race, ethnicity, and income. Lead poisoning is entirely preventable.[249] Children are especially at risk to lead exposure due to unique behaviors (e.g., hand-to-mouth behavior). Further, most of the available evidence suggests that children are more biologically susceptible to the adverse effects of lead because of their developing brains and nervous systems.[250] Especially at risk are very young children for whom exposure per pound of weight is high due to their small size and because of their undeveloped blood-brain barriers.[250,251] Lead exposure in children ages one-to-five is more prevalent among African Americans — who tend to reside in urban areas where older homes may contain lead-based paint hazards[250] (Exhibit 2-45). Blood-lead levels are also high for poor children of all races and ethnicities, compared to their non-poor counterparts.

Exhibit 2-45: Blood-Lead Concentrations in Children, Ages 1-5, by Race, Ethnicity, and Family Income, 2005–2008



Source: U.S. Environmental Protection Agency. Science and Technology: Health. America's Children and the Environment. Body Burdens. Measure B2: Median concentrations of lead in blood of children ages 1-5 by race, ethnicity, and family income.
Data available only for races and ethnicity shown. Poverty status according to U.S. Census Bureau's "poverty income ratio" definitions.
Poor=less than 100% of the poverty threshold; Not poor=200% of the poverty threshold or greater.
http://www.epa.gov/economics/children/body_burdens/b2-table.html Accessed March 25, 2011.

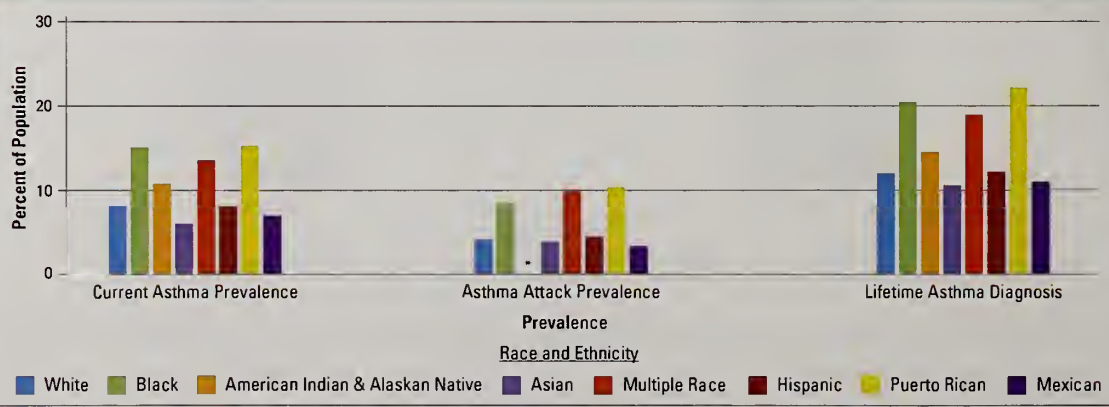
Asthma

Asthma, a chronic respiratory disease, is an environmentally associated disease that disproportionately burdens some minority groups. Asthma attacks can range in severity from mild to life threatening. The etiology of asthma is largely unknown. However, susceptibility for development of asthma can include a family history of the disease or environmental triggers such as tobacco smoke, dust mites, cockroach allergens, pets, mold, or outdoor air pollution (e.g., ozone, particulate matter).[250] In 2005 there were 3,884 deaths in the United States (1.3 deaths per 100,000 population) in which asthma was the underlying cause of death.[252] The majority of these deaths are preventable given established treatment, including avoidance of factors (such as environmental triggers) that initiate asthma attacks.[252]

There are three measures of asthma prevalence. "Asthma attack prevalence" is a measure of individuals who have had an asthma episode or attack in the past 12 months. "Current asthma prevalence" measures individuals who have been told they had asthma and were asked whether they still had asthma. "Lifetime asthma diagnosis" measures individuals who reported whether they had ever been told by a health professional that they had asthma. All three measures evidence disparities by race, ethnicity, and SES.[250]

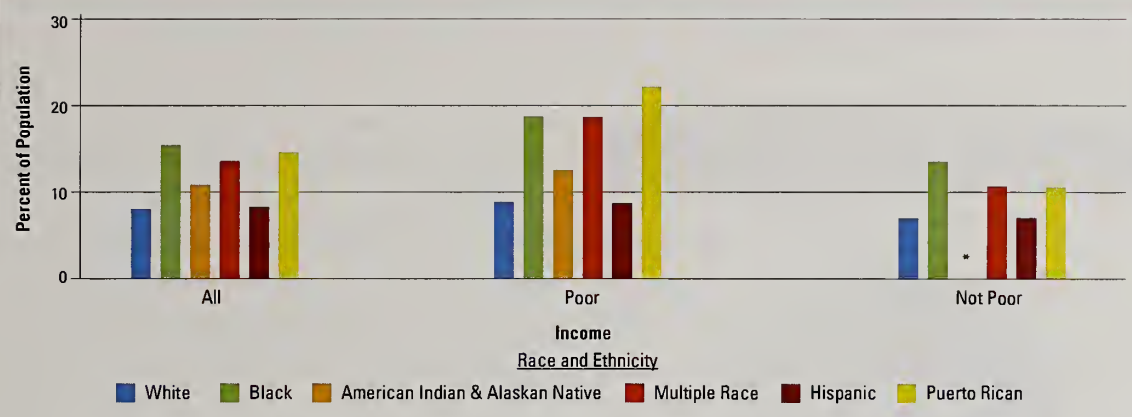
In 2006, nearly 4 million children experienced an asthma attack during the previous 12 months.[250] In all three categories of indicators (see Exhibit 2-46), Puerto Rican, African American, and multiple-race children (from birth to age 17) bore a heavier burden of asthma than did children from the other races or ethnicities shown. Poverty is also a risk factor for asthma as shown in Exhibit 2-47. In all cases, poor children have a higher prevalence of asthma than do non-poor children. Of particular note is the double burden of poverty and minority status that is evident for both asthma and blood-lead level, such that even non-poor Black and Hispanic children have a higher burden of adverse factors than do their White counterparts.

Exhibit 2-46: Asthma Prevalence in Children, Ages 0-17, by Race and Ethnicity, United States, 2007–2009



Source: Centers for Disease Control and Prevention. National Center for Health Stastics. Health Data Interactive. Health Conditions. Asthma and chronic obstructive pulmonary disease: United States, 1998-2009 (source:NHIS). Data for 2007-2009 presented here.
* = unreliable data.
http://www.cdc.gov/nchs/hdi.htm Accessed March 25, 2011.
Note: The Asian race group includes persons who identify themselves as one or more of several different Asian subgroups. Prior to 1999, respondents who identified their race group as "other Asian/Pacific Islander" are included in the "Asian" category in this table. Beginning in 1999, the "other Asian/Pacific Islander" category was replaced by two categories: "other Asian" and "other Pacific Islander."

Exhibit 2-47: Current Asthma Prevalence in Children, Ages 0-17, by Poverty Status, United States, 2007–2009



Source: Centers for Disease Control and Prevention. National Center for Health Stastics. Health Data Interactive. Health Conditions. Asthma and chronic obstructive pulmonary disease: United States, 1998-2009 (source: NHIS). Data for 2007-2009 presented here. Poverty status according to U.S. Census Bureau's "poverty income ratio" definitions. Poor=less than 100% of the poverty threshold; Not poor=200% of the poverty threshold or greater.
* = unreliable data.
http://www.cdc.gov/nchs/hdi.htm Accessed March 25, 2011.

The prevalence of asthma is lower in adults than in children. It is higher among adult females compared to males. This is in contrast with data on children that shows asthma is higher in males than females.[250] However, just as for children, lifetime asthma diagnosis for adults shows disparities by race and SES. African American and multiracial adults, those with less than a high school education, and those with low incomes have a higher lifetime diagnosis of asthma.

Workplace Exposures and Injuries

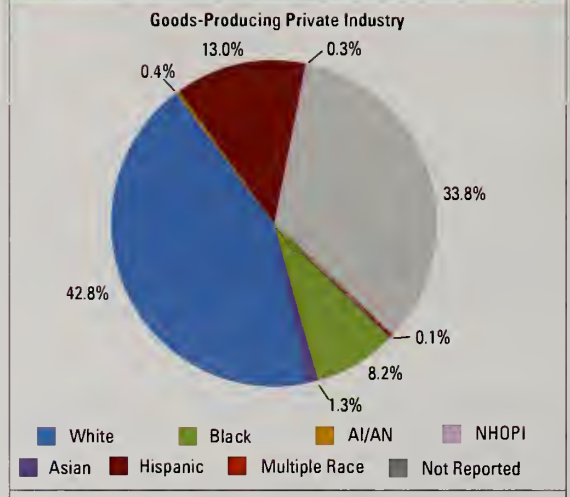
Workplace fatalities, injuries, and illnesses are a significant environmental determinant of health. Just as for other health indicators, disparities in occupational health and safety exist. A 2004 study reveals that minorities were twice as likely to remain disabled after occupational back injuries. The study attributes this to inadequate prescription of relief medication for lower back pain.[253] A recent review found minority patients are:[146]

- Less likely to receive any pain medication
- More likely to receive lower doses of pain medication
- Less likely to receive treatment that falls within WHO recommendations for pain management

As noted in Section 1, the private sector is beginning to realize that there are real bottom-line costs associated with disparities in occupational health and safety. The impact of work-related injury, illness, and death is a significant economic incentive for decreasing health disparities.

There is an indication that Hispanics are proportionally overrepresented (19 percent) for injuries in goods-producing industries compared to their numbers in the population at large (Exhibit 2-48). For example, between 1992 and 2001, Hispanic construction workers were consistently killed on the job more frequently than non-Hispanic workers.[254]

Exhibit 2-48: Nonfatal Occupational Injuries And Illnesses Involving Days Away From Work, United States, 2009



Source: U.S. Department of Labor. Subject Areas: Workplace Injuries. Nonfatal Occupational Injuries and Illnesses. Table 5. Number, percent distribution, and median days away from work for nonfatal occupational injuries and illnesses involving days away from work by related worker characteristics and private industry, state government, and local government, 2009.
Days-away-from-work cases include those that resulted in days away from work, some of which also included job transfer or restriction. Excludes farms with fewer than 11 employees. Because of rounding and data exclusion of nonclassified reponses, percentages may not eqaul to 100%.
AI/AN=American Indian and Alaskan Native;
NHOPI=Native Hawaiian and Pacific Islander.
http://www.bls.gov/news.release/osh2.nr0.htm
Accessed March 25, 2011.

Agricultural workers are at much greater risk for morbidity and mortality from pesticide poisoning than are non-agricultural workers; female workers are at higher risk than are male workers.[255] Further, agricultural workers may expose their children by unknowingly bringing pesticides home on their clothing.

Women are at increased risk for musculoskeletal disorders and acute injuries when using poorly sized personal protection or other equipment designed for men or when lifting heavy loads. Women generally have more work-related problems than do men related to respiratory and infectious diseases, anxiety and stress disorders, and sexual harassment.[256]

Occupation is a key component of SES, and those working at lower-SES jobs are at higher risk for workplace exposures and injuries.[257, 258] For example, a MacArthur Research Network study noted that lower-SES workers are more likely to be exposed to noxious chemicals and physical hazards such as noise, heat, heavy lifting, long work hours, unstable shift assignments, and risk of injury.[258] The study concludes that "although labor policy may seem distant from health policy, the fact is that each affects the other ... the investment we make in improving work conditions — including policies that reduce stress in the work world or that enable workers to cope with the pressures that cannot easily be changed — will make a difference in reducing disparities between the most and least-advantaged workers."[258]

Thus, policymakers, employers, labor unions, and other workplace stakeholders are necessary partners in developing comprehensive health intervention programs and in identifying the workplace as an important place to implement interventions that promote health equity. The National Institute for Occupational Safety

and Health's WorkLife Initiative is an example of an approach combining workplace protections with health promotion activities.[259] Another example comes from the recommendations of the American Heart Association, which provide a comprehensive approach to workplace wellness including reducing workplace stress and controlling hazardous exposures as key components of a successful program.[260]

Biological and Genetic Determinants of Health

Health is determined by a complex interaction of biological, genetic, social, environmental, and developmental factors. Advances in science and scientific methods, particularly in our understanding of genetics and epigenetics, have greatly enhanced our ability to document and explore these interactions. For example, African Americans evidence disparities in heart disease. Various gene loci have been linked to early-onset hypertension or to risk of heart failure in African Americans.[261, 262] Research that examines the potential biological or genetic determinants of health has traditionally involved the medical and bench-research sciences rather than the social sciences. However, transdisciplinary research approaches and teams are becoming the norm. A number of studies, such as the federally sponsored Jackson Heart Study, began in 2000 as an epidemiological examination of cardiovascular disease in African Americans.[263] The comprehensive Jackson Heart Study (which is similar to the Framingham Heart Study of predominantly White individuals), examines and identifies environmental, genetic, and other risk factors that influence the development of cardiovascular diseases in African American men and women.

Members of racial and ethnic minority groups have been historically underrepresented in clinical research studies and clinical trials,[264, 265] yet it is such studies that are the means by which biological and genetic determinants can be identified. Efforts continue for the identification of strategies that will attract and retain racial and ethnic minorities for medical research studies. For example, the Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial (ALLHAT)[266] and the African American Heart Failure Trial (A-HeFT)[267] are programs that include African Americans and other racial and ethnic minorities in studies of cardiovascular health.

Translating research-based evidence into preventive actions and strategies is a key to a healthier populace and the reduction of health disparities. Aggressive, wide, and prominent promotion of prevention strategies will contribute to the well-being and quality of life for all Americans.[268]

HEALTHCARE WORKFORCE

There is currently a shortage of health professionals in the United States, and it is probable that such shortages will continue into the foreseeable future — as has been widely discussed and predicted. A

report commissioned by the Health Resources and Services Administration (HRSA) notes that there are a host of complex factors that contribute to the characteristics and size of the present and future workforce. These factors include demographics, the health profession's education system, the healthcare environment, and a range of other policy and economic issues.[269] The report specifically focused on the implications of changing U.S. demographics on the healthcare workforce. Key pressures on workforce numbers include an aging population with more complex health needs, geographic location of patients relative to providers, and the increasing racial and ethnic diversity of the U.S. population. These pressures pose both current and future demands for the U.S. healthcare workforce, signaling new directions in workforce composition, distribution, expertise, and training.

The HRSA report further noted that, all things being constant, the aging of the American population would significantly increase the demand for physicians and nurses. Older adults are living longer, bear the greater burden of chronic disease, and rely on health care far more than other age groups. The number of older adults is expected to double by 2030, to comprise nearly 20 percent of the U.S. population.[270] Racial and ethnic minorities, who already face severe disparities in healthcare delivery, are projected to grow to 24 percent of the older population by 2020, up from 16 percent in 2000.[271] However, not only is the general population aging, so too are the health professionals who care for them. A recent IOM report, "Retooling for an Aging America: Building the Health Care Workforce," pointed to the complex dynamic of growing numbers of older Americans coincident with potentially fewer health professionals to meet their needs. The result portends an avertable healthcare crisis brought by a shortage of health professionals.[272]

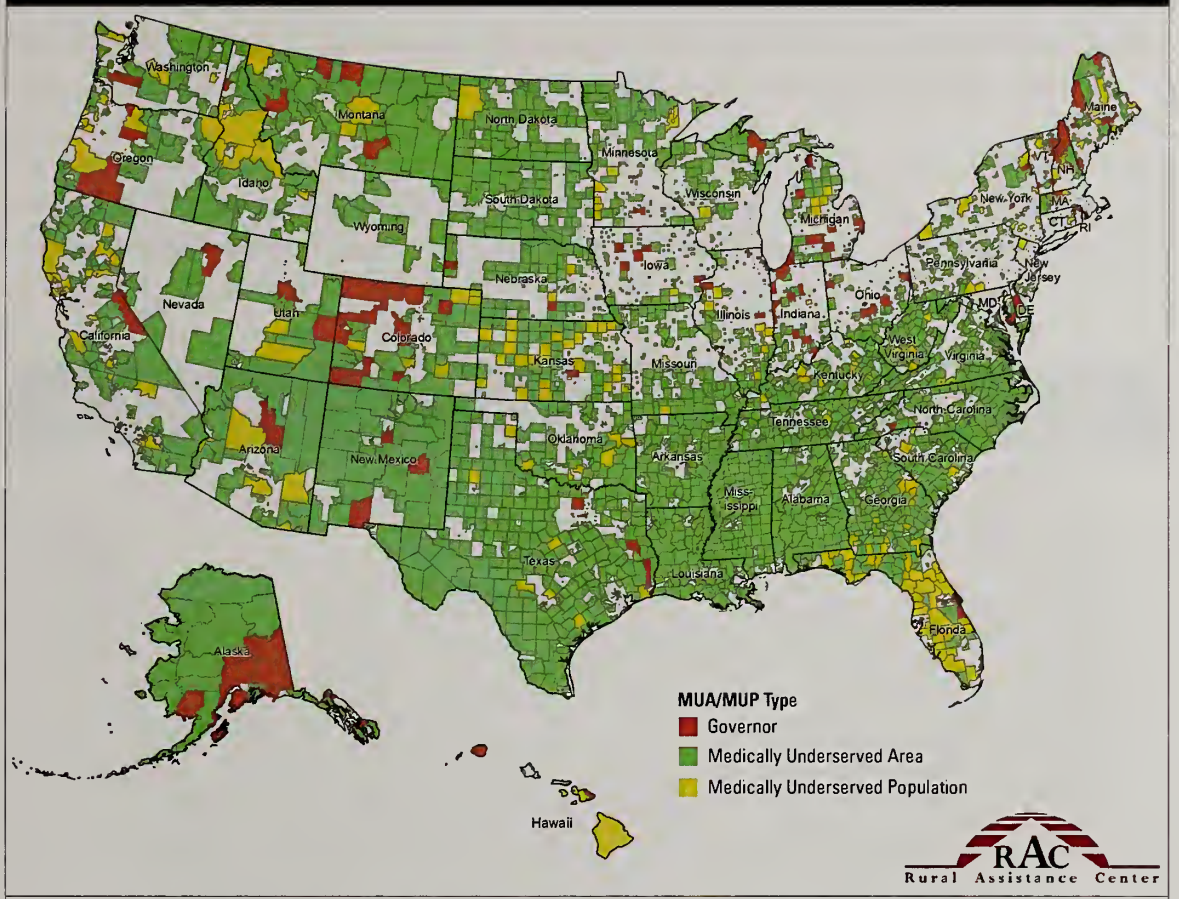
At the same time, for many geographic areas across the country — from small rural communities to major metropolitan centers — the threat of having too few health professionals is an immediate, day-to-day reality, posing a workforce challenge that must be addressed without delay.

Medically Underserved Areas and Populations

Much of the United States has designated populations or geographic areas that are recognized by state governors or HRSA as medically underserved (Exhibit 2-49).

For the past 40 years, HRSA has supported a system of community-based Health Centers. They have been a source of health care for people of all ages, races, and ethnicities. They provide comprehensive primary healthcare service to all, even those without health insurance — with fees based on ability to pay. Some Health Centers focus on certain special populations including migrant and seasonal farm workers; individuals and families experiencing homelessness; those living in public housing; and Native Hawaiians. The Health Centers are located in medically underserved areas (MUAs) or serve medically underserved populations (MUPs); are governed by a community board; and provide culturally competent care.

Exhibit 2-49: Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) - Designated Type



Governor: MUP designation at the request of a state governor to document unusual local conditions and barriers to accessing personal health services. MUA: area designated for the resident civilian population. MUP: population designated for a specific population.
Source: Health Resources and Services Administration - (HRSA), Bureau of Health Professionals; October 7, 2009. Note: Alaska and Hawaii not shown to scale.

Health Professional Shortage Areas

Due to the chronic scarcity of local healthcare providers, certain geographic, demographic, or institutional areas have been designated by HRSA as Health Professional Shortage Areas (HPSAs)[272] for primary medical care, dental care, or mental health care. As of May 2010, HRSA reported that there were almost 14,000 HPSAs distributed throughout the United States and across all health regions.[272]

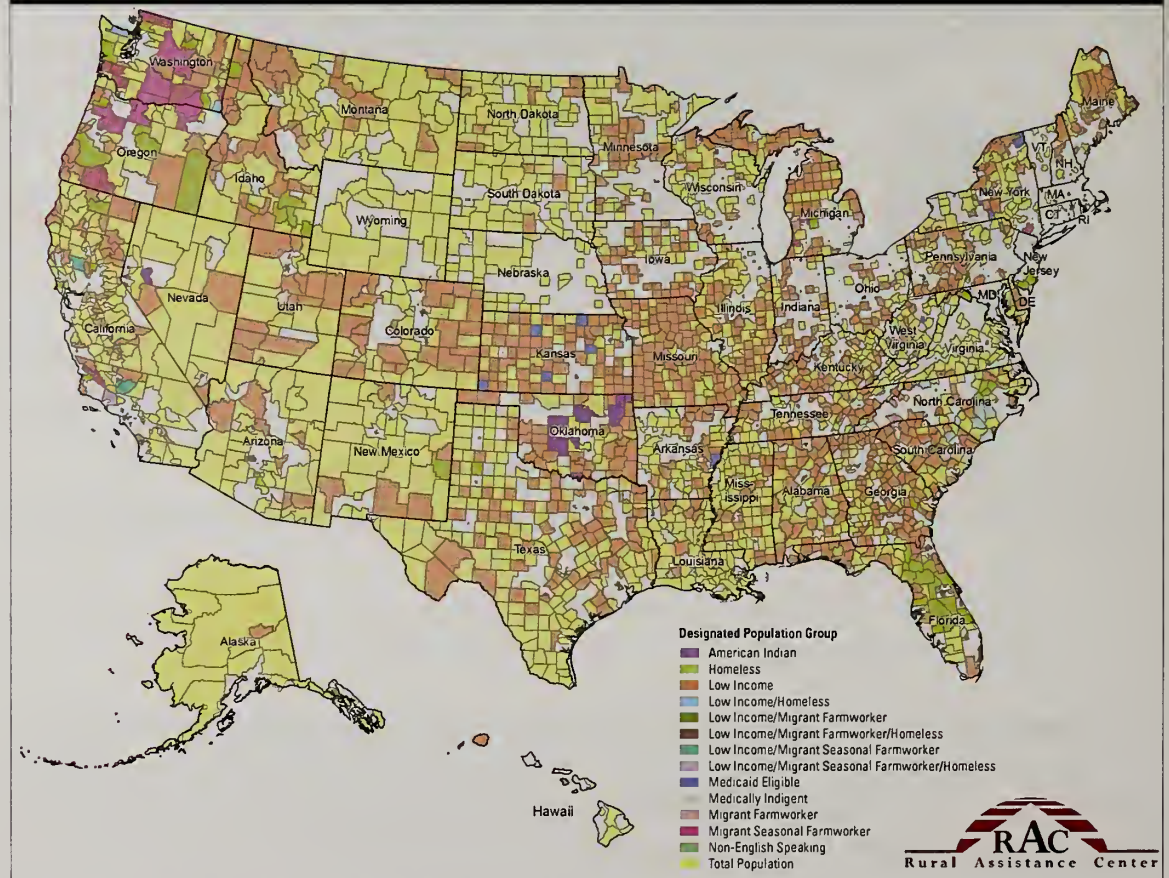
- There are 6,204 Primary Care HPSAs with 65 million people living in them. It would take 16,643 practitioners to meet their needs for primary care providers (a population to practitioner ratio of 2,000:1).

- There are 4,230 Dental HPSAs with 49 million people living in them. It would take 9,642 practitioners to meet their need for dental providers (a population to practitioner ratio of 3,000:1).

- There are 3,291 Mental Health HPSAs with 80 million people living in them. It would take 5,338 practitioners to meet their need for mental health providers (a population to practitioner ratio of 10,000:1).

The maps shown in Exhibits 2-50 through 2-52 depict HPSAs for Primary Health Designated Populations; HPSAs for Mental Health Designated Populations; and HPSAs for Dental Health Designated Populations in the United States.

Exhibit 2-50: Health Professional Shortage Areas (HPSAs) - Primary Health Designated Populations

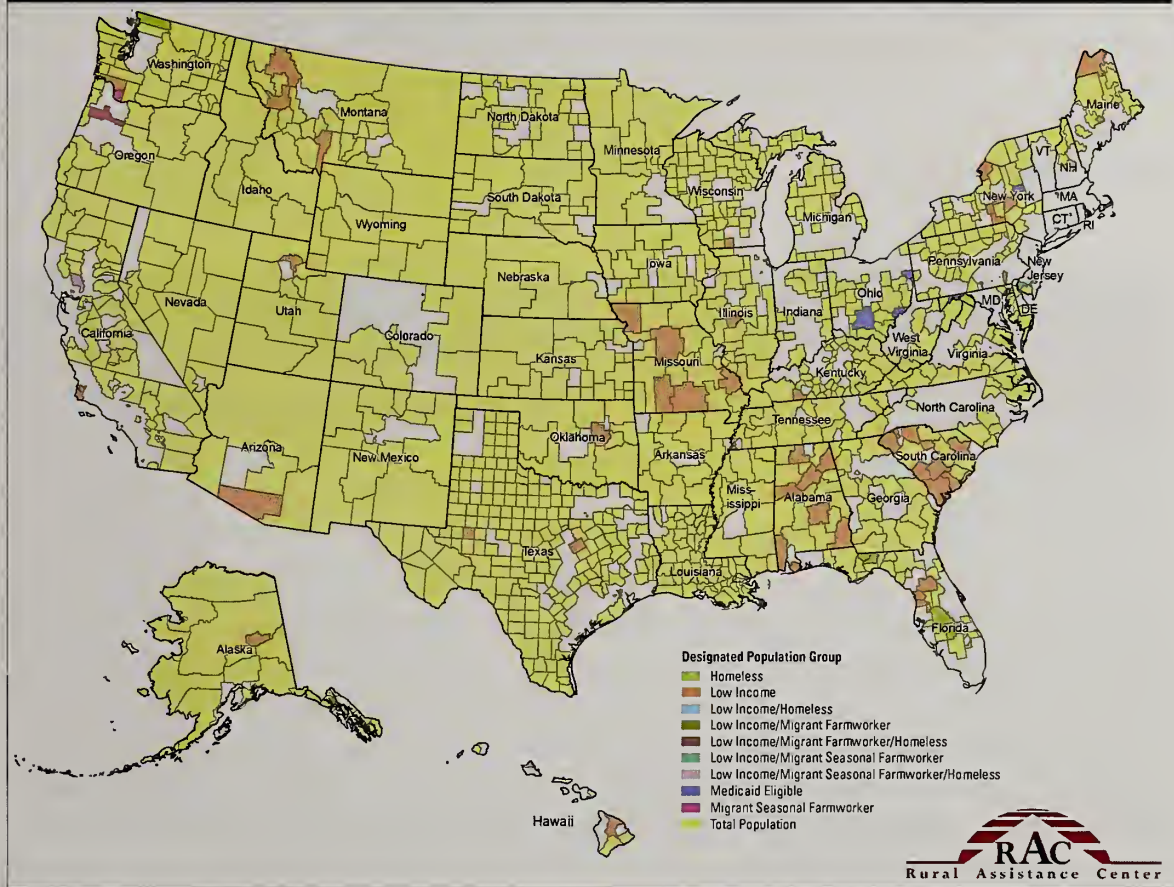


Designated Population: a population within an area that is designated as a HPSA.
Source: Health Resources and Services Administration. Bureau of Health Professionals; October 7, 2009.
Note: Alaska and Hawaii not shown to scale.

The National Health Service Corps (NHSC) assists HPSAs in every state, territory, and possession of the United States to meet their primary care, oral, and mental health services needs.[273] Over its 39-year history, the NHSC has offered recruitment incentives in the form of scholarship and loan repayment support to nearly 30,000 health professionals who are committed to service for the underserved. NHSC clinicians have expanded access to high-quality health services and improved the health of underserved people.

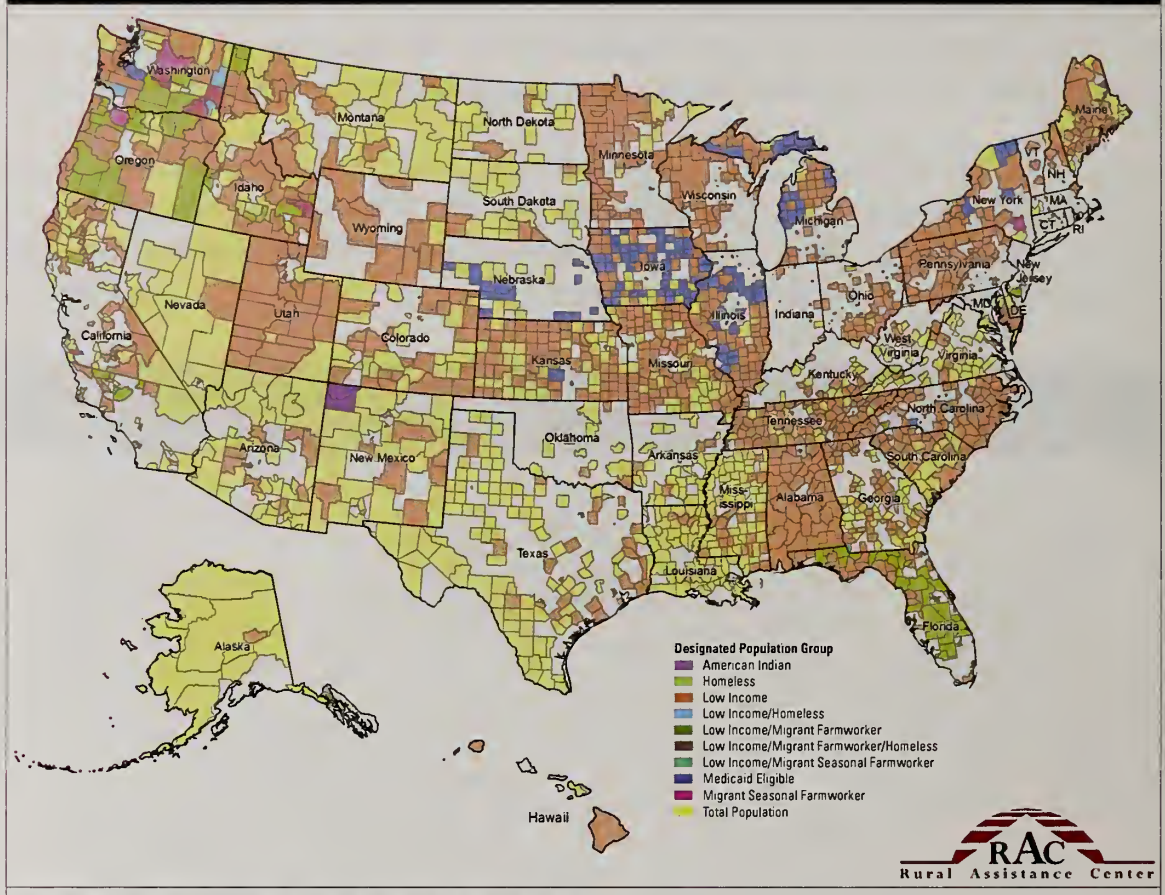
The NHSC has, since its inception in 1972, worked closely with the federally funded Health Centers to help meet their clinician needs. Currently, approximately 50 percent of the NHSC clinicians serve in Health Centers around the nation. The NHSC also places clinicians in other community-based systems of care that serve underserved populations, targeting HPSAs of greatest need.

Exhibit 2-51: Health Professional Shortage Areas (HPSAs) - Mental Health Designated Populations



Designated Population: a population within an area that is designated as a HPSA.
Source: Health Resources and Services Administration. Bureau of Health Professionals; October 7, 2009.
Note: Alaska and Hawaii not shown to scale.

Exhibit 2-52: Health Professional Shortage Areas (HPSAs) - Dental Health Designated Populations



Designated Population: a population within an area that is designated as a HPSA.
Source: Health Resources and Services Administration. Bureau of Health Professionals; October 7, 2009.
Note: Alaska and Hawaii not shown to scale.

The 2008-2018 workforce projections for the United States indicate that approximately 26 percent of all new jobs created in the economy will be in the healthcare and social assistance industry. The increasing demand for healthcare services is expected to drive employment growth for healthcare practitioners and technical occupations by 21 percent. The healthcare industry includes a broad spectrum of health professionals — from physicians, dentists, nurses, allied health professionals, and direct-care workers, to many others. Of the 30 fastest-growing occupations in the United States for 2008-2009, more than half were allied health professionals. More recent data shows that the majority of the top-20 occupations with the fastest growth were health related.

Diversity of the Workforce

One of the most pervasive and enduring challenges facing the healthcare workforce is the critical shortage of racial and ethnic minorities serving in health professions and the need to improve cultural competency throughout the U.S. health system. Historically, minorities have faced severe barriers in gaining admission to schools of medicine, nursing, and dentistry, and in securing careers in the health professions. For example, prior to the gains of the civil rights movement, Blacks were effectively banned from all but a few of the nation's medical schools and systematically denied access to membership in state medical societies. Today, Blacks, Hispanics, American Indians and Alaskan Natives, and certain Asian populations continue to face significant structural and other barriers to entering health professions.

The Sullivan Commission's report and others highlight the influence of insufficient numbers of minority health professionals on persistent racial and ethnic health disparities.[274] The Sullivan Commission's report noted that while Blacks, Hispanics, and American Indians and Alaskan Natives together comprised nearly 25 percent of the U.S. population, they represented less than 9 percent of nurses and 5 percent of dentists. The American Medical Association reported that of the 921,904 physicians in the United States in 2006, 3.5 percent were Black, 5.0 percent were Hispanic, and 0.02 percent were American Indian or Alaskan Native (Exhibit 2-53). Racial and ethnic minorities are represented in higher percentages among female physicians than among male physicians.

Exhibit 2-53: Physicians by Race, Ethnicity, and Gender, 2006

Race/Ethnicity	Number	Percent	Male		Female	
			Number	Percent	Number	Percent
White	514,254	55.8	383,473	57.6	130,781	51.0
Black	32,452	3.5	17,313	2.6	15,139	5.9
Hispanic	46,214	5.0	31,205	4.7	15,009	5.9
Asian	113,585	12.0	72,121	10.8	41,464	16.1
AI/AN	1,444	0.02	834	0.01	610	0.02
Other	12,572	1.4	8,831	1.3	3,741	1.5
Unknown	201,383	22.0	151,870	23.0	15,[illegible]	19.3

Source. American Medical Association. Minority Affairs Consortium. Physician Statistics (source: Physician Characteristics and Distribution in the US, 2008). Total Physicians by race/ethnicity, 2006; Number of male physicians by race/ethnicity, 2006; Number of female physicians by race/ethnicity, 2006. AI/AN=American Indian and Alaskan Native; NHOPI=Native Hawaiian and Pacific Islander.
http://www.ama-assn.org/ama/ Accessed March 25, 2011

The IOM *Unequal Treatment Report* identifies system-level, provider-level, and patient-level factors that may contribute to racial and ethnic disparities in treatment. At the provider level these disparities may arise from provider bias, stereotypes, and clinical uncertainty.[8] Consequently, the two-fold goal of increasing diversity and promoting cultural competency in the healthcare workforce represent key intervention strategies.[8,274,275]

According to AHRQ, diversity in the healthcare workforce — among physicians, dentists, nurses, and other healthcare service providers — is "an important element of a patient-centered healthcare encounter."[38] Diversity is essential to primary care and to medical specialties and sub-specialties. It increases opportunities for race-concordant and language-concordant healthcare encounters.

As an example, the social work profession is one of the most racially and ethnically diverse health-related professions in the nation. Of the more than 642,000 professional social workers in the United States today, the majority (54 percent) practice in behavioral health or healthcare settings.[276] Social workers typically provide services to underserved and economically disadvantaged populations and communities — in hospitals and clinics, schools and housing units, senior centers and nursing homes, and in public and private agencies. Social workers provide clinical and care coordination services, link clients with resources, develop and test programs, and advocate for public policies focused on the health and well-being of vulnerable populations. As a health profession positioned at the nexus between patient and service systems, social workers can and must play a pivotal role in the elimination of health disparities.

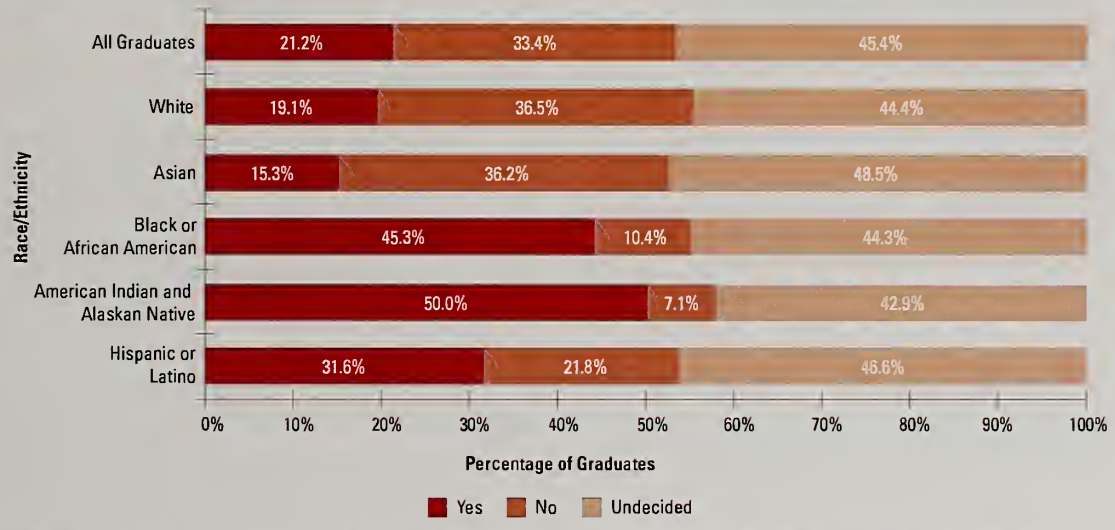
Beyond the basic issues of language competency and effective communication, there are important issues of cultural competency that may be facilitated by health professionals who share the same cultural and language backgrounds. For example, it has been well established that minorities are less likely to express attitudes of trust toward medical and public health institutions than are Whites.[68,69,70,277] It is generally held that this phenomenon relates to an intergenerational awareness of past incidences of medical abuse and mistreatment of minority patients (e.g., the Tuskegee syphilis study conducted by the Public Health Service). Trusting, respectful, and communicative relationships within a healthcare setting enhance patient understanding, patient compliance, and shared decision making — all gateways to high-quality healthcare delivery and better health outcomes. Minority healthcare providers play a unique role in fostering these crucial gateways of communication and compliance.

More fundamentally, a diverse healthcare workforce can also improve basic access to health care for racial and ethnic minority groups and other underserved populations. One of the most compelling arguments for recruiting minorities into the health professions is the critical shortage of healthcare providers, especially primary care physicians, in underserved areas and among underserved populations.

Student and Faculty Development

Shortage of physicians and other health professionals in underserved areas is a widespread problem.[278, 279] Approximately 50 percent, 45.3 percent, and 31.6 percent of American Indian and Alaskan Native, African American, and Hispanic/Latino medical school graduates respectively plan to practice in an underserved area (Exhibit 2-54). Given the shortages in the pool of healthcare workers and the numbers of racial and ethnic minority health professionals that provide care in underserved areas, it makes economic and social sense to bring as many talented minority students into the health profession's pipeline as quickly as possible.

Exhibit 2-54: Percentage of Medical School Graduates Planning to Practice in an Underserved Area, 2007



Source: Diversity in Medical Education: Facts & Figures 2008. ©2008 Association of American Medical Colleges (AAMC). All rights reserved. Reproduced with permission. AI/AN= American Indian & Alaskan Native
www.aamc.org/diversity/

In addition to healthcare delivery, diversity has considerable value at other levels of the U.S. health system, including research, public health, education, health plans, policy, and others. For example, research studies benefit from investigators who are from diverse populations (e.g., gender, race, ethnicity) and who hold an understanding of the unique needs and values of local communities.[280] Institutions that approach minority individuals or communities with only their own research agendas or needs in mind are likely to be unsuccessful. However, programs and protocols that target particular community needs and that provide value to the community will have a higher likelihood of success. Thus, the presence of minority scientists on clinical research teams not only contributes to the study, it may also foster credibility for future research studies within minority communities. Minority researchers may offer better cultural and linguistic competency and understanding of minority health needs than non-minority researchers who have only classroom training in competency issues.

For reasons similar to those described above, public health, policy, and other health-system employees, as well as medical school faculty, will benefit from diversity and cultural competency. A significant but surmountable challenge to increasing diversity throughout the healthcare system is the structural task of strengthening the pipeline to health professions. An important consideration here is the current demographics of individuals pursuing careers in health care and professions that influence health (see Exhibits 2-55 through 2-57).

Exhibit 2-55: Minorities Enrolled in U.S. Health Schools, 2007–2008

Race/Ethnicity	Percent Distribution of Students in Each Profession					
	Dentistry	Medicine (Allopathic)	Medicine (Osteopathic)	Optometry	Pharmacy	Podiatry
NH White	60.6	62.4	70.5	60.3	59.5	62.2
NH Black	5.9	7.2	3.8	3.1	6.4	10.7
AI/AN	0.6	0.9[b]	0.7	0.3	0.5	0.5
API	22.7	21.5	17.4	25.1	21.6	11.8
Hispanic	6.3[a]	3.1[c]	3.6	4.6	4.0	5.4

Source: Centers for Disease Control and Prevention. National Center for Health Statistics. Publications and Information Products. Health, United States, 2010. Table 114: Total enrollment of minorities in schools for selected health occupations, by race and Hispanic origin: U.S., selected academic years 1980-1981 through 2005-2006. Data for 2007-2008 presented here. Data do not add to 100 percent because categories for other remaining students are not provided in source dataset. Dataset designates White or Black race without designation.

[a] Data include students from the University of Puerto Rico.

[b] Data include American Indian & Alaskan Native, and Native Hawaiian students.

[c] Data include Cuban students.

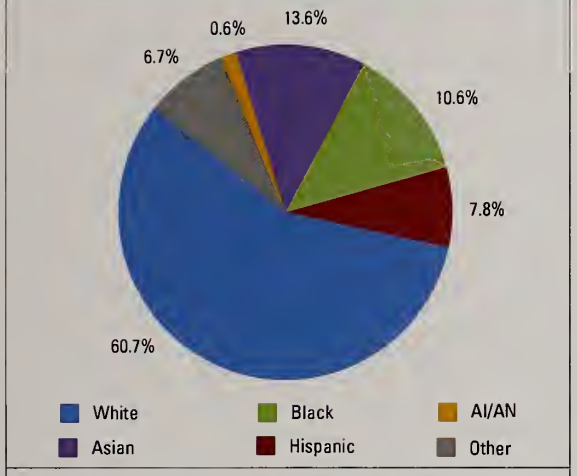
NH=Non-Hispanic; AI/AN=American Indian and Alaskan Native; API=Asian or Pacific Islander.

http://www.cdc.gov/nchs/data/hus/hus10.pdf Accessed March 25, 2011.

As the majority race category, White students are predominate in all of the health professions. However, they are represented in health profession schools at somewhat lower proportion (60-70 percent), compared to their representation in the population as a whole (Exhibit 2-55). In contrast, Asians and Pacific Islanders comprise about 5 percent of the total U.S. population, yet represent 15-20 percent of students in dental, medical, optometry and pharmacy schools. The reverse is true for Hispanics, who represent about 15 percent of the U.S. population but comprise only 4 to 7 percent of the student population of health schools. Except for podiatry and nursing, Blacks are underrepresented as students of dentistry, medicine, optometry, and pharmacy (Exhibit 2-55). In addition, racial and ethnic minorities are also underrepresented as students in physician assistant programs.[281]

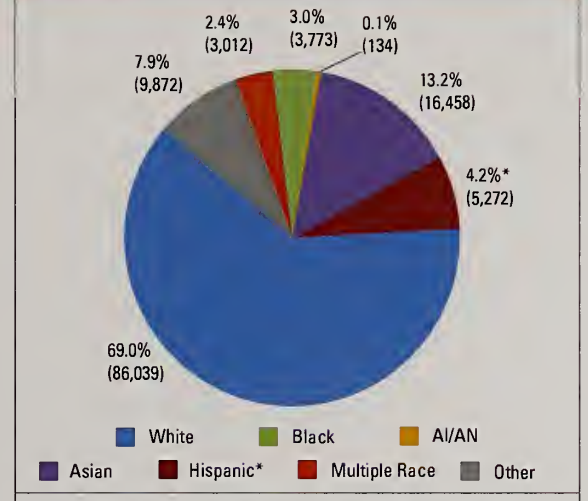
Graduates from public health schools have similar characteristics to those who are enrolled in medical, dental, optometry, and pharmacy schools (Exhibit 2-56). For example, Hispanic students are underrepresented in public health schools compared to their representation in the general population.

Exhibit 2-56: Graduates of Public Health Schools by Race and Ethnicity, United States, 2008–2009



Source: Association of Schools of Public Health. Annual Data Report, 2009. Table 4.3: U.S. graduates by school and race/ethnicity. Information from the 43 accredited U.S. schools of public health, including Puerto Rico. Data for academic year 2008-2009.
AI/AN = American Indian and Alaskan Native
http://www.asph.org/UserFiles/Data%20Report%202009.pdf
Accessed March 25, 2011.

Exhibit 2-57: Percentage and Number of Medical School Faculty, United States, 2007



Source: Diversity in Medical Education: Facts & Figures 2008.
©2008 Association of American Medical Colleges (AAMC). All rights reserved. Reproduced with permission.
AI/AN = American Indian & Alaskan Native; NHOPI = Native Hawaiian/Pacific Islander; Multiple race = more than one race and ethnicity . * Includes Mexican American, Puerto Rican, Cuban, other Hispanic/Latino, multiple Hispanic.
www.aamc.org/diversity/

The proportion of medical school faculty by race and ethnicity also follows a similar pattern. For example, in comparison to White faculty (69 percent), Black (3 percent), Hispanic (4.2 percent), and American Indian and Alaskan Native faculty (0.1 percent) are underrepresented (Exhibit 2-57).

Developing a pipeline that leads to diversity in the healthcare workforce demands a substantial investment to improve educational opportunities and experiences for minorities — from kindergarten to university to clinical training and on to leadership development. The human and economic cost of not ensuring a diverse, well-trained healthcare workforce is far greater than the cost of investment.

SUMMARY

This section provided evidence that supports the comments and concerns about health disparities that were expressed by community and other stakeholders at regional meetings and other activities facilitated by OMH. Section 3 provides strategies to aid community leaders and groups as well as public and private organizations in implementing their vision of a healthy nation by offering a set of goals and corresponding strategies.

Section 3: The National Stakeholder Strategy

The *National Stakeholder Strategy*

A PRACTICAL CONTEXT FOR CHANGE

The fundamental purpose of *the National Stakeholder Strategy* is to promote systematic and systemic change that improves the overall health of the nation. Achieving this purpose will take time, include many people, and require that steps be taken incrementally while maintaining focus on the ultimate goal of achieving health equity. In this regard, the information in this section addresses the practical matter of what may be required to influence change and improve outcomes for affected communities. It sets out a strategy for change based on the five key goals and 20 strategies that were developed through the extended grass-roots process that is described in Section 1 (see also Exhibit 1.1). The goals and their corresponding strategies provide a starting point and menu of resources for stakeholders to design actions that are achievable through their scopes of influence and areas of expertise.

It is important to reiterate the message from Section 1 that the *National Stakeholder Strategy* responds to the voices of thousands of leaders from across the United States who called for actions to effectively and efficiently address health and healthcare disparities in this country. These leaders represented community-based organizations; faith-based organizations; the business sector; healthcare workforce; health and insurance industries; academia; local, state, tribal, and federal governments; and others. The *National Stakeholder Strategy* is also based on Congressional language, which called for a national strategy that is implemented and monitored in partnership with state and local governments, communities, and the private sector.

Partnerships within and beyond the health sector can address crosscutting, multilevel issues to achieve health equity. Formation of wide-ranging partnerships is the next best step forward towards tackling this ultimate goal. It will be the job of change-oriented organizations and individuals to take the goals and strategies in this document and adapt them to their own missions, interests, and needs—in order to develop the actions that they can implement to effect change.

The resources in this section are not necessarily the final or only methods for ending health disparities and achieving health equity. That is, each strategy is not necessarily applicable to all stakeholders. Rather, this *National Stakeholder Strategy* provides a common reference point, language, and initial set of actions for any group that wishes to seriously engage in ending health disparities. This is especially important for the development of strong, strategic, collaborative partnerships among disparate organizations.

The hope is that stakeholders will be encouraged to use the goals and strategies to ensure focused progress toward achieving health equity. The overarching benchmark that all should aim to realize is the

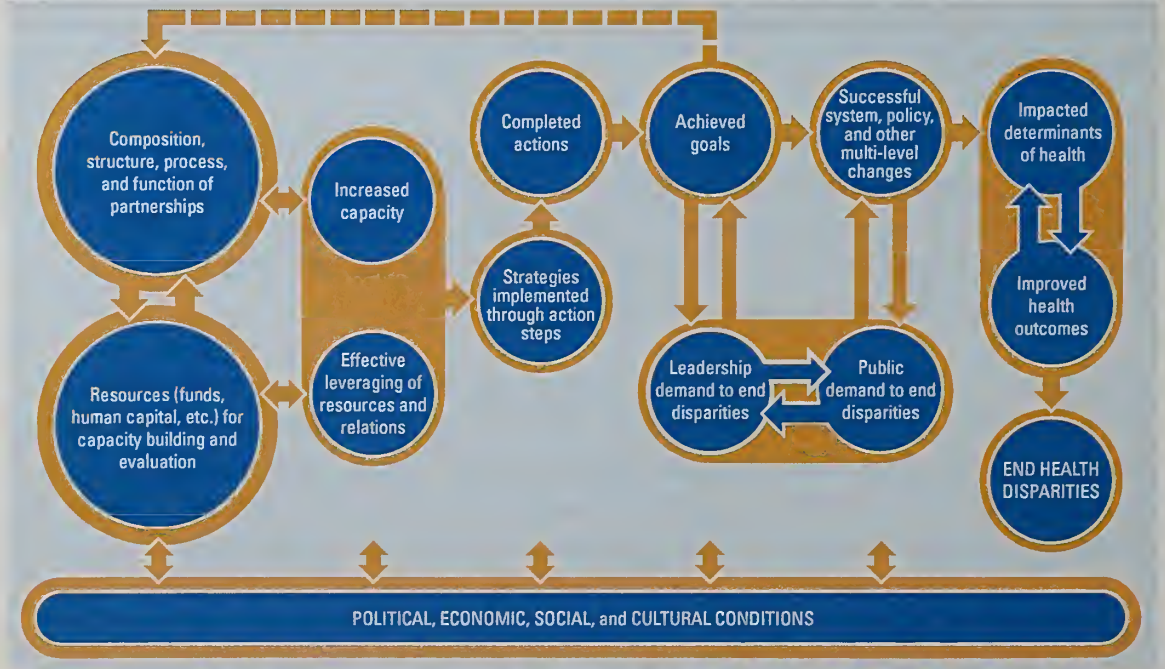
reduction in the incidence and prevalence of health conditions and diseases for which disparities exist, and to seek the gradual elimination of the determinants that are the root causes of poor health.

With this practical background in mind, the following subsection briefly describes a theoretically based context for change. The theory of change model was developed to reflect the process that would begin at this juncture of the *National Stakeholder Strategy's* history. This model is a general road map to ensure that individuals, organizations, and partners stay focused while engaging in incremental steps that lead to the end of health disparities.

A THEORETICAL CONTEXT FOR CHANGE

As shown on the following diagram, the context for change model begins on the far left with input from partnerships (e.g., local, state, tribal, regional, and national) that play the primary role in setting the initial context for change and the impetus for its continuation. The far right of the diagram displays the final output—the overriding goal—of the end of health disparities through changing adverse determinants of health and improving health outcomes. The input, output, and intervening steps all have arrows to indicate the interrelationships of all the steps and the iterative nature of the whole process.

Exhibit 3-1: Context for Change


Composition, structure, process, and function of partnerships
Resources (funds, human capital, etc.) for capacity building and evaluation
Increased capacity
Effective leveraging of resources and relations
Strategies implemented through action steps
Completed actions
Achieved goals
Leadership demand to end disparities
Public demand to end disparities
Successful system, policy, and other multi-level changes
Impacted determinants of health
Improved health outcomes
END HEALTH DISPARITIES
POLITICAL, ECONOMIC, SOCIAL, and CULTURAL CONDITIONS

The composition, structure, process, and function of partnerships will affect their capacity and effectiveness. The partnerships and the entire process depend on resources to build their capacity to function effectively and efficiently and to initiate and evaluate their efforts. Resources include not only funding, but also the necessary resources of knowledge, skills, and other forms of support and human capital that lie within or outside the partnerships. The capacity of partners increases and becomes more effective as they leverage resources and the relationships required to prioritize their objectives and to develop and implement actions that support their strategies. An interactive and iterative effect between the partnerships' initial and increased capacities points to a continuous process of improvement.

Implementation of the strategies could lead to the partial or total achievement of one or more of the five goals and impact two key levers of change: leadership and public demand to end disparities. The combined impact would be successful system, policy, and other multilevel changes. Over time, the continuous interaction among goal attainment, successful changes, leadership, and public demand to end disparities would affect the conditions in which people are born, grow, learn, live, work, play, and age (i.e., determinants of health)—leading finally to an improvement in the health outcomes of people who experience disparities.

The model emphasizes an iterative cycle of adjustments to the partnerships' structure, process, composition, and functions in order to continuously increase their capacity, resources, and relationships for achieving their goals. Partnerships will operate within particular political, economic, social, and cultural contexts. These contexts can dramatically affect the change process. The ability to work across cultures—those based on racial, ethnic, and cultural identities and those based on geographic and organizational settings—affects every goal, strategy, objective, and action.

> "If we as a country want to learn how to create an effective healthcare system for all, it's really important to hear the voices of all."
>
> –NPA Regional Meeting participant

The remainder of this section lays out background information for each of the five NPA goals and links them to the 20 strategies that were developed through the grass-roots process that produced this *National Stakeholder Strategy for Achieving Health Equity*.

Exhibit 3-2: SUMMARY OF NPA GOALS AND STRATEGIES

Goal #	Goal Description	Strategies
1	**AWARENESS—** Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations	1. **Healthcare Agenda** Ensure that ending health disparities is a priority on local, state, tribal, regional, and federal healthcare agendas
		2. **Partnerships** Develop and support partnerships among public, nonprofit, and private entities to provide a comprehensive infrastructure to increase awareness, drive action, and ensure accountability in efforts to end health disparities and achieve health equity across the lifespan
		3. **Media** Leverage local, regional, and national media outlets using traditional and new media approaches as well as information technology to reach a multi-tier audience—including racial and ethnic minority communities, youth, young adults, older persons, persons with disabilities, LGBT groups, and geographically-isolated individuals—to encourage action and accountability
		4. **Communication** Create messages and use communication mechanisms tailored for specific audiences across their lifespan, and present varied views of the consequences of health disparities that will encourage individuals and organizations to act and to reinvest in public health.
2	**LEADERSHIP—** Strengthen and broaden leadership for addressing health disparities at all levels	5. **Capacity Building** Build capacity at all levels of decision-making to promote community solutions for ending health disparities
		6. **Funding Priorities** Improve coordination, collaboration, and opportunities for soliciting community input on funding priorities and involvement in research and services
		7. **Youth** Invest in young people to prepare them to be future leaders and practitioners by actively engaging and including them in the planning and execution of health, wellness, and safety initiatives
3	**HEALTH SYSTEM AND LIFE EXPERIENCE—** Improve health and healthcare outcomes for racial, ethnic, and underserved populations	8. **Access to Care** Ensure access to quality health care for all
		9. **Children** Ensure the provision of needed services (e.g., mental, oral, vision, hearing, and physical health; nutrition; and those related to the social and physical environments) for at-risk children, including children in out-of-home care
		10. **Older Adults** Enable the provision of needed services and programs to foster healthy aging
		11. **Health Communication** Enhance and improve health service experience through improved health literacy, communications, and interactions
		12. **Education** Substantially increase, with a goal of 100%, high school graduation rates by working with schools, early childhood programs, community organizations, public health agencies, health plan providers, and businesses to promote the connection between educational attainment and long-term health benefits
		13. **Social and Economic Conditions** Support and implement policies that create the social, environmental, and economic conditions required to realize healthy outcomes
4	**CULTURAL AND LINGUISTIC COMPETENCY—** Improve cultural and linguistic competency and the diversity of the health-related workforce	14. **Workforce** Develop and support the health workforce and related industry workforces to promote the availability of cultural and linguistic competency training that is sensitive to the cultural and language variations of diverse communities
		15. **Diversity** Increase diversity and competency of the health workforce and related industry workforces through recruitment, retention, and training of racially, ethnically, and culturally diverse individuals and through leadership action by healthcare organizations and systems
		16. **Ethics and Standards, and Financing for Interpreting and Translation Services** Encourage interpreters, translators, and bilingual staff providing services in languages other than English to follow codes of ethics and standards of practice for interpreting and translation. Encourage financing and reimbursement for health interpreting services
5	**DATA, RESEARCH, AND EVALUATION—** Improve data availability, coordination, utilization, and diffusion of research and evaluation outcomes	17. **Data** Ensure the availability of health data on all racial, ethnic, and underserved populations
		18. **Community-Based Research and Action, and Community-Originated Intervention Strategies** Invest in community-based participatory research and evaluation of community-originated intervention strategies in order to build capacity at the local level for ending health disparities
		19. **Coordination of Research** Support and improve coordination of research that enhances understanding about, and proposes methodology for, ending health and healthcare disparities
		20. **Knowledge Transfer** Expand and enhance transfer of knowledge generated by research and evaluation for decision-making about policies, programs, and grant-making related to health disparities and health equity

GOALS AND STRATEGIES

Goal 1. Awareness: Increasing Awareness of the Significance of Health Disparities, Their Impact, and Necessary Actions

The 1985 *Heckler Report* documented the continuing burden of disparities for racial and ethnic minorities, noting that such disparities had "existed ever since accurate federal recordkeeping began more than a generation ago."[10] In assessing access to health information, the *Heckler Report* concluded that minority populations might be less knowledgeable of specific health problems than non-minorities. The *Heckler Report* developed recommendations for improving awareness through outreach and patient education.

Twenty-five years later, the NPA's *National Stakeholder Strategy* points to the necessity of increasing public awareness of health disparities. In spite of the longstanding evidence for health and healthcare disparities in this country, there continues a low level of awareness of health disparities among the American public and among healthcare providers.[8] Various reports over time—such as those described in the paragraphs below—have shown that Americans and health professionals are not sufficiently informed about health and healthcare disparities.

In 1999, the Kaiser Family Foundation conducted a study to assess the public's perceptions and attitudes about racial and ethnic differences in health care. The survey, which included a nationally representative sample of Whites, African Americans, and Latinos, found that most Americans (62 percent) were uninformed about disparities in health care. Another important finding was that there were differing views about the role that race plays in accessing quality care. Most African Americans and Latinos believed that they receive lower quality care and that race and ethnicity influence the ability to get routine care. White respondents did not share this view. The study concluded that "efforts to eliminate health disparities will need to improve public awareness of the problems and address barriers of race and money in health care."[70] A 2006 survey by the Kaiser Family Foundation yielded results similar to those from the 1999 survey.

The Harvard School of Public Health and the Robert Wood Johnson Foundation conducted a poll in 2005 (Whites, African Americans, and Hispanics/Latinos) to evaluate the American public's knowledge about healthcare disparities. Key findings from this survey were similar to those from the Kaiser Family Foundation's study regarding the lack of widespread recognition of the existence of disparities in health care. Overall, only 32 percent of Americans believed that getting quality care was more difficult for minorities. Different populations had diverging views about the influence of race or ethnicity in the quality of care received. Twenty-three percent of African Americans believed that they received poor quality of care because of their race. In contrast, only 1 percent of Whites believed this. Furthermore, 21 percent of Hispanics/Latinos believed that they received poor quality care because of their accent or inability to speak English well.

In 2002, the Kaiser Family Foundation released findings of a national survey showing that, in general, doctors are less likely than the public to say disparities occur "very often" or "somewhat often."[282] However, by 2005, a study by the American Medical Association showed that physicians were becoming more involved in addressing healthcare disparities. Findings from this national survey showed that 55 percent of physicians agreed that minority patients generally receive lower quality care than do White patients.[283]

The challenge before us is to ensure that all stakeholders, not just racial and ethnic minority communities, understand the problem and are working together to enhance the visibility of this critically important public health issue. The challenge also calls for working collaboratively to develop a more coordinated approach to health promotion and disease prevention across the lifespan to encourage healthier lifestyles for all Americans. The awareness goal is not only about doing things differently, but also about working more strategically to obtain a stronger return on our investment.

The four strategy charts below address the goal of awareness through strategies based on healthcare agenda, partnerships, media, and communication. For each strategy, there is a menu of objectives, measures, and potential data sources which are tools for stakeholders to use in implementing any given strategy.

GOAL 1: AWARENESS

Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations

STRATEGY 1: HEALTHCARE AGENDA

Ensure that ending health disparities is a priority on local, stateb, tribal, regional, and federal healthcare agendas

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Strengthen city/county, state,b and federal minority health entities (such as an office, commission, council) and tribal health offices and establish a health disparities liaison in non-health departments (such as education, housing, labor) to ensure local, state, and tribal partnerships and decision-making power 2. Identify and develop relationships with non-partisan think tanks and other policy centers to advance and disseminate model policies that address determinants of health, reduce health disparities, and work to achieve health equity across the lifespan 3. Establish and utilize a national minority health information exchange or portal system as the central repository of all minority health data and related information, including government- and private-funded research, publications, podcasts, Web-based resources and trainings, conference proceedings, and best and replicable practices for ending health disparities 4. Develop partnerships among foundations, local businesses, nonprofit organizations, educational institutions, and community leaders to advocate for local policies and actions that create and sustain conditions for good health	1. Number and distribution of state and county/city minority health entities (such as office, commission, council), tribal health offices, health disparities liaisons established, and their degree of collaboration and decision-making power 2. Number, types, scale, and scope of activities conducted by stakeholder groups to address health disparities 3. Number and types of policy actions driven by data about determinants of health and health disparities 4. Number of local, state, tribal, and federal government plans that address health disparities and health equity 5. Percent of public or private funding allocated to support activities, including cross-agency collaborations to eliminate health disparities 6. Utilization trends for a national minority health information exchange	1. Organizational charts, mission statements, and other organizational information for city/county, state, and tribal governments and local health departments, as well as job descriptions for health disparities liaisons 2. City/county, state, tribal, and federal government strategic plans (e.g., departments of health and human services' strategic plans, community strategic plans) 3. State public health budgets—line items related to health disparities 4. National Association of County and City Health Officials' Local Health Department Infrastructure Study—data on local health department expenditures 5. U.S. Census Bureau's Census of Governments—data for government expenditures on health 6. National Conference of State Legislatures' Health Resources and Research—collection of articles, briefs, bills/summaries, databases, and letters and testimonies related to health disparities 7. Surveys of local and state health departments, academic institutions, businesses, philanthropic organizations, and community groups on health disparities 8. Federal Office of Minority Health's awareness surveys

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

[b] The use of "state" in this chapter includes Territories and the District of Columbia.

GOAL 1: AWARENESS

Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations

STRATEGY 2: PARTNERSHIPS

Develop and support partnerships among public, nonprofit, and private entities to provide a comprehensive infrastructure to increase awareness, drive action, and ensure accountability in efforts to end health disparities and achieve health equity across the lifespan

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Establish or assess and strengthen formal partnerships at different levels (i.e., community, city/county, state, and tribal) and across sectors (i.e., public, nonprofit, and private sectors) that have the potential to impact health disparities, opportunities for new collaboration, and prospects for improved coordination and integration. 2. Identify or create health equity and neighborhood solution groups[b] to help apply and implement Blueprints for Action,[c] support evaluation of activities and results related to the Blueprints, update the Blueprints periodically, and develop annual reports 3. Identify and engage community leaders; local, state, tribal, and regional funders; local coalitions and alliances; nonprofit organizations; and non-traditional partners in neighborhood solution and health equity groups. Provide infrastructure support, and coordinate activities to minimize unnecessary duplication of efforts 4. Connect health equity and neighborhood solution groups, collaboratives working on health disparities-related issues, and alliances representing different racial, ethnic, gender, disabilities, age, and LGBT groups and geographic communities to the *National Stakeholder Strategy* to adopt joint actions for ending health disparities	1. Number, composition, distribution, and goal attainment of partnerships addressing health disparity and health equity issues 2. Distribution and type of health disparity activities, including those that contributed to policy actions or changes, carried out annually by partners at different levels and across sectors 3. Composition and distribution of health equity and neighborhood solution groups 4. Number and type of goals and actions implemented and achieved by health equity and neighborhood solution groups 5. Number of health equity and neighborhood solution groups' recommendations that contributed to policy actions or changes by local, state, tribal, or federal agencies and/or organizations in the nonprofit and private sectors 6. Number of actions by health equity and neighborhood solution groups, and other types of collaboratives and alliances linked to the national efforts to end health disparities	1. Survey of local and state health departments, academic institutions, businesses, and community groups on partnerships to address health disparities 2. National Business Group on Health surveys 3. National Institute on Minority Health and Health Disparities (NIMHHD); National Institute of Mental Health's Outreach Partnership Program; Substance Abuse and Mental Health Services Administration's National Network to Eliminate Health Disparities in Behavioral Health 4. American Public Health Association's Health Disparities Community Solutions Database—review public-private partnership activities 5. Agency for Healthcare Research and Quality's Health Care Innovations Exchange Health Disparities Database—searchable database with information on public-private partnerships 6. Health equity and neighborhood solution groups

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

[b] Establishment of health equity and neighborhood solution groups are encouraged and anticipated at the neighborhood, city/county, state, tribal, and regional levels.

[c] Blueprints for Action will be developed for each of the 10 HHS regions, people with disabilities, LGBT groups, and the American Indian and Alaskan Native population.

GOAL 1: AWARENESS

Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations

STRATEGY 3: MEDIA

Leverage local, regional, and national media outlets using traditional and new media approaches as well as information technology to reach a multi-tier audience—including racial and ethnic minority communities, youth, young adults, older persons, persons with disabilities, LGBT groups, and geographically isolated individuals—to encourage action and accountability

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Encourage public and private partners to develop and support a public relations/social marketing infrastructure for addressing health disparities and health equity that can also serve as a platform for local, state, tribal, regional, national information campaigns in order to "mainstream" the message 2. Maintain media spotlight on health disparities by providing data and information to representatives (e.g., journalists, reporters, bloggers) of mainstream and community-based media outlets, including media specifically used by racial, ethnic, and other underserved populations 3. Create messages about health disparities and potential solutions that are relevant to target audiences (e.g., youth, racial and ethnic minorities, people with disabilities, older adults, LGBT communities) and train leaders, community partners, and health equity advocates to adopt and use them effectively with media representatives 4. Strengthen the ability of media representatives to frame disparities-related stories about the impact of health disparities, the link between health disparities and the social and economic well being of all, and effective solutions (e.g., provide easy access to comprehensive data, link them to appropriate information sources, including experts on the issues, civil rights advocates, and local leaders)	1. Distribution of coordinated public information campaigns for eliminating health disparities 2. Content of health disparity-related news events and stories published 3. Number and types of actions spurred by public information campaigns 4. Number of unique visitors to targeted health disparities Web sites (e.g., Office of Minority Health, Agency for Healthcare Research and Quality, National Institute on Minority Health and Health Disparities) 5. Diversity of media outlets disseminating content on health disparity-related messages 6. Number of first-time town hall or informational meetings and events that address health disparities 7. Placement of health disparities-related articles and stories in print and broadcast mainstream and non-mainstream media, including films and movies	1. Local and national news and media outlets (print, radio, and television)—data on news events stories and publications related to health disparities 2. Survey of minority or special interest media and news outlets for information on stories and news events related to health disparities 3. Federal agencies such as the Office of Minority Health, National Institute on Minority Health and Health Disparities, and the Agency for Healthcare Research and Quality data on Website traffic and unique visitors

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 1: AWARENESS

Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations

STRATEGY 4: COMMUNICATION

Create messages and use communication mechanisms tailored for specific audiences across their lifespan, and present varied views of the consequences of health disparities that will encourage individuals and organizations to act and to reinvest in public health

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Establish common messages grounded in current communications research, about ending health disparities across the lifespan, which can be used by organizations that support the *National Stakeholder Strategy*	1. Distribution of common messages about ending health disparities, including the cost of health disparities to society as a whole	1. Local networking Web sites' records on user-created sites related to health disparities and chronic disease prevention and viewings/visits to these sites (e.g., YouTube, Twitter, Facebook)
2. Create, disseminate, and encourage data briefs about different forms of health disparities based on gender, stages of development (e.g., older adults and young people), race and ethnicity, sexual orientation or gender identity, disability, socioeconomic status, and geographic location to educate opinion leaders and inform solutions	2. Number, distribution, content, and use of health disparity data briefs	2. Content analyses of strategy, communications plans, press releases, reports, and campaign materials of *National Stakeholder Strategy* partner agencies for information on messaging
3. Support the use of blogs, podcasts, text messaging, online and mobile video, e-games, social networks, and other interactive technologies to engage diverse racial, ethnic, and other underserved groups in conversations and forums about preventing chronic and infectious diseases	3. Distribution and content of viewings or messages on targeted user-generated Web sites	3. National Opinion Survey on Health and Health Disparities
4. Create partnerships to conduct joint information campaigns with health disparity and health equity messages that are appropriately targeted to populations across the lifespan	4. Number and distribution of organizations carrying out joint campaign activities with common messages during National Minority Health Month and other relevant awareness celebrations	4. Local, state, tribal, and federal agencies that have information campaigns
5. Facilitate conversations with community leaders who can contribute to the development and dissemination of health equity message	5. Distribution and content of messages and information on mainstream and culturally specific media outlets that are not health disparities-focused, with messages related to health disparities	5. www.gaydata.org

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

Goal 2. Leadership: Strengthening and Broadening Leadership for Addressing Health Disparities

The underlying causes of health and healthcare disparities are multi-faceted and therefore require comprehensive solutions. The *National Stakeholder Strategy's* goals are intended to address these underlying causes by encouraging cohesive and comprehensive actions. Leaders play a pivotal role in any effort to create change, mobilize stakeholders, and advance solutions to issues of significant concern. Given the breadth, scope, and complexity of health and healthcare disparities, current leaders will need to become more engaged, and new leaders will need to be developed. Building leadership is a key responsibility of any collaborative effort to address complex issues and achieve beneficial outcomes.[284] There is a growing pool of talented leaders among racial and ethnic minorities and underserved communities and an increased willingness to engage them as sources of insight for identifying problems and finding solutions.

Cross-sectoral leadership, from the community to the national level, enables opportunities to harness the full complement of experiences, concerns, and ideas that are critical to developing comprehensive solutions. While leaders are needed at all levels of engagement, community leaders have been a long-overlooked resource for developing local solutions. In many instances, community- and faith-based organizations and other safety-net programs are the most accessible resources for leadership among minority and other underserved communities. These organizations often lack the funding, infrastructure, and technical or personnel support to appropriately tackle disparities. Investing in tools and providing capacity-building assistance is vital for ensuring that community and other leaders can engage as equal partners.

Local businesses and research, academic, health industry, and other organizations play a vital role in providing capacity-building support to develop and engage community leaders. They can serve as conveners of meetings with legislators, public health officials, community representatives, private sector representatives, and others seeking to advance actions to end health disparities. They are also positioned to assist communities in identifying information related to their health concerns and in developing neighborhood strategies to address disparities.

Strengthening and supporting current leadership, however, is not sufficient; we also have to invest in this nation's future leaders. The nation's youth are an important resource for developing current and future leaders. After several years of decline across the nation, the population of young Americans is growing and in coming years will rival the size of the baby- boomer generation. They will ultimately become the adults who make decisions that reshape our social, physical, economic, and cultural environments and produce innovations to combat health and healthcare disparities. Youth-serving organizations are a resource for shaping youth and helping them become the leaders of tomorrow.[285]

The three strategy charts below address the goal of leadership through strategies based on capacity building, funding and research priorities, and youth. For each strategy there is a menu of objectives, measures, and potential data sources, which are tools for stakeholders to use in implementing any given strategy.

GOAL 2: LEADERSHIP
Strengthen and broaden leadership for addressing health disparities at all levels

STRATEGY 5: CAPACITY BUILDING
Build capacity at all levels of decision-making to promote community solutions for ending health disparities

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Establish and expand access to leadership trainings and planning and operational tools to equip institutional, local, and community leaders with the capacity to: a) design and deliver effective prevention, wellness, and other services to end health disparities; b) engage community members as equal partners in designing and conducting assessments and taking action; and c) partner effectively with government, academic, private, and nonprofit organizations on activities to end disparities for their communities and constituents	1. Degree to which local health disparity efforts are shaped and led by local and community leaders and, therefore, are tailored to the specific needs, context, and history of the targeted communities	1. U.S. Census Bureau's Census of Governments—review of federal and state budgets and amount of funds allocated to community capacity building to address health disparities
2. Create opportunities for entry- and mid-level professionals to receive leadership training and mentoring in order to create and expand the pipeline of leaders who can address health disparities	2. Proportion of local and state budgets and foundation grants allocated for technical assistance and other supports to help community organizations address health disparities and health equity	2. Interviews with leaders and key informants of programs and initiatives that provide technical assistance and other supports to local groups on ending health disparities
3. Create and implement a system to train and build the skills of leaders and staff in the public and philanthropic sectors and at different levels (i.e., local, state, tribal, or federal) to support and engage in community-oriented prevention and health equity work, particularly in providing equitable opportunities for community organizations to compete for funding	3. Type, frequency, and number of local, state, and regional networks intended to build public, private, and nonprofit organizations' capacities for engaging community representatives in all aspects of planning and implementing solutions for ending health disparities	3. Survey of community-based groups engaged in health disparities programming
4. Provide technical assistance and other resources to improve the capacity of community organizations to collect, analyze, report, and use data for competitive submissions to foundations, government agencies, and other funders	4. Adoption of principles by agencies and organizations in the public, private, and nonprofit sectors for engaging community representatives in decision-making and evidence of such policies, procedures, and practices	4. Agency of Healthcare Research and Quality's Health Care Innovation Exchange Health Disparities Database and American Public Health Association's Health Disparities Community Solutions Database —review of community projects related to *the National Stakeholder Strategy* goals
5. Create principles that for agencies and organizations in the public, private, and nonprofit sectors can use to engage community representatives as equal partners in decisions about how to address the disparities that affect their communities		5. National Association of County and City Health Officials' Local Health Department Infrastructure Study—data on local health department expenditures allocated to community capacity building to address health disparities
		6. Survey of local, statewide, and national foundations to determine amount of funds allocated to community capacity building to address health disparities

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 2: LEADERSHIP

Strengthen and broaden leadership for addressing health disparities at all levels

STRATEGY 6: FUNDING AND RESEARCH PRIORITIES

Improve coordination, collaboration, and opportunities for soliciting community input on funding priorities and involvement in research and services

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Broaden outreach to include representatives of state agencies and nonprofit and community-based organizations, especially those knowledgeable about different racial, ethnic, and underserved populations, as potential grant reviewers and recipients of research projects	1. Number of review panels in public agencies and foundations that include community representatives and health consumers, particularly from different racial, ethnic, and other underserved populations	1. National Institutes of Health, Office of Minority Health, national health foundations and intermediaries, state and local health departments—demographic information of grant review panel members; committees and commissions; and boards of grant recipients, contractors, and partners
2. Work with agencies and organizations in the public, private, and nonprofit sectors to include representatives from different racial, ethnic, age, and gender groups; LGBT and disability communities; and geographically diverse places in decisions about funding, programmatic, and research priorities where they have historically been excluded (e.g., create opportunities for such representation on committees, commissions, and boards)	2. Distribution and diversity of community representatives from different racial, ethnic, and other underserved populations on local, state, and federal committees and commissions and on boards of private and nonprofit organizations	2. National Institutes of Health's Research Portfolio Online Reporting Tools (RePORT)
3. Improve coordination of technical assistance and other resources to help community-based organizations write and submit quality grant proposals	3. Number, distribution, and co-funding of technical assistance and other support programs in grant writing	3. Grant-writing technical assistance activities sponsored by local, state, tribal, and federal agencies; foundations; and other entities
4. Incentivize state agencies, institutions of higher education, academic medical centers, and private and nonprofit research organizations to invest in local health equity efforts and to collaborate with community-based organizations as an equal or lead partner	4. Proportion of funds allocated by local, state, tribal, and federal agencies and private funders and made available to community-based organizations to address at least one *National Stakeholder Strategy* goal	4. Requests for proposals and background, context, or rationale sections of funded proposals
5. Establish regional and national consortia to connect academic and research institutions, evaluators, intermediaries, and community-based organizations to: a) inform the use of funds for research and services, and b) use research and evaluation findings to inform the development and implementation of projects to end health disparities and achieve health equity	5. Degree to which data about determinants of health are required and provided in grant proposals	5. Survey of community-focused centers of excellence
6. Strengthen centers of excellence that focus on concerns, strategies, and solutions informed by community leaders and representatives and people affected by health disparities	6. Number, distribution, and use of community-focused centers of excellence	

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 2: LEADERSHIP

Strengthen and broaden leadership for addressing health disparities at all levels

STRATEGY 7: YOUTH

Invest in young people to prepare them to be future leaders and practitioners by actively engaging and including them in the planning and execution of health, wellness, and safety initiatives

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Build the capacity of adults to engage and support youth of different gender, race/ethnicity, geographic location, sexual orientation or gender identity, disabilities, and socioeconomic status, as equal partners in decision-making about programmatic and funding priorities and in the design and implementation of community assessments and initiatives 2. Build the capacity of youth of different gender, race/ethnicity, geographic location, sexual orientation or gender identity, disabilities, and socioeconomic status to lead and participate in publicly and privately supported efforts to end health disparities 3. Educate and train youth, especially youth who have been historically excluded, to become peer leaders and advocates for their health and well-being and to address health disparities and other health-related issues that affect them	1. Distribution and diversity of youth on governing and advisory boards 2. Number and distribution of health education and promotion programs that train and use youth peer leaders and advocates 3. Percent of sessions at conferences that address youth-focused health disparity issues and percent of sessions organized, led, and presented by youth 4. Distribution of local, state, tribal, regional, national youth organizations that include health disparities as a program or policy priority	1. Neighborhood Solution Groups and state, tribal, regional, and national health equity coalitions 2. Agendas of conferences that address health disparities and youth issues 3. Mission statements, policy agendas, program activities, and budgets of local, state, tribal, regional, and national youth and health organizations

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

Goal 3. Health System and Life Experience: Improving Health and Healthcare Outcomes for Racial, Ethnic and Underserved Populations

Health is influenced by a number of interrelated factors that impact individuals where they live, learn, work, play, and age. These factors include the social, economic, and physical environments as well as individual characteristics and behaviors.[4] Health and healthcare disparities affect individuals across the lifespan and require comprehensive solutions, coordination across sectors, and supportive policies to address them. [32]

The *Unequal Treatment Report* highlights many factors that contribute to disparities in health outcomes. These include health system-related factors, as well as the actions and attitudes of individuals (e.g., healthcare providers, utilization managers, and patients). At a systems level, this can include institutional bias, the lack of cross-cultural education in the training of health professionals, and the lack of policies and infrastructure to address the multiple needs of diverse clients. At the individual level, there may be a lack of knowledge among healthcare providers about multicultural service provision and culturally relevant care, and among patients and other consumers of health services, a lack of understanding about their rights and responsibilities and the role they play in determining their own health futures. When patients have "medical homes" (settings that provide timely, well-organized care and enhanced access to providers), racial and ethnic disparities are reduced.[286]

There is also a need for improvements in the health communication experience for patients and their providers.[287,288] As defined by Healthy People 2010, *health literacy* is "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions."[289] An IOM report further explains *health literacy* as more than individual skills, but as a shared function with health systems and healthcare providers to present information in an appropriate manner.[290] Research from the U.S. Department of Education reveals that only 12 percent of English-speaking adults in the United States have proficient health literacy skills. Furthermore, approximately 45 percent of high school graduates have limited health literacy.[291] Successful communication and interaction between patients and providers promotes respect of patients' wants, needs, and preferences and fosters an environment that promotes understanding of services offered, informed decision-making, and active participation in personal care.[292]

Researchers have found that Hispanics and Asian Americans have less confidence in their physicians than do Whites.[293] African Americans and Hispanics consistently rate as "low" the quality of communication and interaction with their providers.[294] Contributing to these phenomena are the real and perceived experiences of racism among minority populations. This, in turn, fosters mistrust of healthcare institutions and providers and a corresponding diminished willingness to access institutional healthcare resources. Research studies also have identified specific positive provider behaviors (e.g., listening to patients and their families, explaining treatment options, encouraging participatory decision-making, spending time with patients, and patients' perception of respect) as important indicators of patient satisfaction with the health system.[293,295,296]

There is a relationship between education and health.[297] Low educational attainment is a powerful predictor of adverse health outcomes. Although the reasons behind this relationship are complex, a basic component relates to differences in the behaviors of higher- and lower-educated groups. Generally, individuals with higher levels of education have healthier behaviors. For example, they are more likely to exercise, less likely to smoke, and less likely to be exposed to behaviors that may harm health. In the United States, men and women have similar levels of academic achievement. However, African Americans, Native Americans, and Hispanics have lower academic attainment levels. The gap for these three groups widens at higher levels of academic experience. This gap contributes to the health disparities experienced by these populations.

Research also has shown a powerful link between social and economic factors and health.[59,65,67] Eliminating health disparities and achieving health equity will require attention to these issues (e.g., availability and accessibility of nutritious food, adequate transportation, affordable housing, safe living conditions, quality of air and water, accessibility of education and job opportunities, and stress caused by perceived racial discrimination), which require comprehensive solutions, coordinated efforts across sectors, and supportive policies.

Health and healthcare disparities that are linked to the above issues affect individuals across the lifespan. Health disparities based on socioeconomic status can persist, starting from fetal health to elderly health;[32] children and older adults are especially vulnerable. Given existing evidence that links education and health, it is clear that children need the necessary services to help them learn better in order to optimize their potential for high academic achievement. This means that they require the proper oral, mental, physical, and other services to ensure their quality of health throughout their development. Likewise, older adults, especially those with limited mobility and resources, require additional assistance in accessing preventive care, self-management programs, and other types of supportive services.

The six charts below address the goal of health system and life experience through strategies based on access to care, children, older adults, health communication, education, and social and economic conditions. For each strategy there is a menu of objectives, measures, and potential data sources, which are tools for stakeholders to use in implementing any given strategy.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE

Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 8: ACCESS TO CARE

Ensure access to quality health care for all

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Support community-driven needs assessments	1. Proportion of providers that use health information technology to monitor and support quality care improvements	1. U.S. Census Bureau
2. Communicate the expectations and benefits of a health home (including medical homes and other health settings) to different racial and ethnic groups, underserved populations, and health professional community	2. Increase in proportion of families from different racial, ethnic, and other underserved populations who have access to health homes	2. Current Population Survey
3. Improve comprehensive primary health services that include preventive care and screenings and enhance the coordination of care and service delivery, including the use of Community Health Workers, to ensure comprehensive support for culturally, linguistically, and geographically isolated communities	3. Decrease in number of inappropriate visits to the emergency room, use of ambulances, and hospitalizations for manageable chronic conditions	3. National Health Interview Survey
4. Develop and strengthen partnerships to outreach, identify, and improve access for individuals who are eligible for Medicaid or CHIP and for the uninsured and underinsured, rural community residents, racial and ethnic minorities, and others with limited access to health care due to historical exclusion and other barriers	4. Increased access to and use of preventive care services (e.g., increase in health screening rates)	4. Agency for Healthcare Research and Quality's State Snapshots of Health Quality
5. Assess the affordability of out-of-pocket health care costs for the under-served and low-income populations and identify strategies for reducing these costs	5. An infrastructure for monitoring the percent of underserved and low- income populations who do not access health care due to high out-of-pocket cost	5. National Hospital Discharge Survey
6. Incentivize culturally and linguistically competent providers to practice in medically underserved areas and to improve their distribution in order to provide first-contact, comprehensive services, and continuous, coordinated care	6. Increase in health, wellness, and safety programs that target the reduction of health disparities and produce a change in personal health practices (e.g., reduced absenteeism at work, quality of life satisfaction, etc.)	6. Healthcare Cost and Utilization Project (The State Emergency Department Database)
7. Incentivize health service providers to adopt and adhere to quality improvement standards (safe, patient-centered, effective, timely, efficient, equitable), including the use of health information technology to: a) enable information sharing among providers within the Health Information Portability and Accountability Act's restrictions; b) provide individual patients, including the limited English-proficiency population and individuals with disabilities, access to their individual medical records; and c) generate reports on compliance with quality care standards and support improvements	7. Provider-patient ratio in medically underserved areas	7. The Emergency Room Database
	8. Increase in healthcare providers who deliver prevention messages to their patients and their families (e.g., exercise safely, wear protective gear, install smoke alarms, etc.)	8. Indian Health Services Health Promotion/Disease Prevention Wellness Data
	9. Increase in the use of telemedicine with provider reimbursements equivalent to face-to-face office and clinic visits	9. Medicare, Medicaid, CHIP, community health center, and clinic data

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE

Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 9: CHILDREN

EEnsure the provision of needed services (e.g., mental, oral, vision, hearing, and physical health; nutrition; and those related to the social and physical environments) for at-risk children, including children in out-of-home care

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Improve different racial, ethnic, and underserved populations' access to maternal, infant, and early childhood support services, including clinics with expertise in pediatric environmental health and anti-bullying interventions	1. Increase in early periodic screenings, diagnostic, and treatment rates	1. Children's Health Insurance Research Initiative issue briefs, reports on access to care and services, quality, and disparities among low-income children
2. Collaborate with health providers, educators, and caregivers to assure that children are properly immunized and have up-to-date and appropriate well-child visits, including medical, dental, developmental, social, and mental health screenings	2. Increase in identification, referral, and treatment for children facing medical, developmental, and other health issues	2. Health Resources and Services Administration's National Survey of Children with Special Health Care Needs—data on extent to which children with special health care needs have access to health homes, adequate health insurance, and access to needed services, as well as their care coordination and satisfaction with care
3. Establish ongoing health communication to educate children, their parents, and other caregivers about the impact of healthy nutrition, injury prevention, and physical activity on children's life and functioning	3. Percent of resources allocated to support state, tribal, and local health agencies in providing no-cost or low-cost immunization	3. Local, state, tribal budgets; National Association of County and City Health Officials' Health Department Infrastructure Study—data on local health department expenditures; U.S. Census Bureau's Census of Governments— review for allocation of resources to low- or no-cost immunization services for at-risk children
4. Support the establishment of school-based health centers to facilitate interaction between providers and school staff, students, and their parents, and provide comprehensive services	4. Number, distribution, and content analysis of social marketing campaigns on the importance of nutrition and physical activities for children	4. Centers for Medicare & Medicaid Services' Annual Early and Periodic Screening, Diagnostic, and Treatment Report
5. Use child health outcome data to inform quality of care for children, especially for children and families with specific healthcare needs	5. Number and distribution of community health centers or clinics within or adjacent to schools	5. National Children's Health Survey— data on children's health status (physical and oral health)
6. Promote linkages and strengthen collaboration among pediatricians, early childhood educators, preventive care services, other health and social service providers, and families to ensure school readiness and access to comprehensive services	6. Increase in resources allocated to address stressors that affect children's health	6. Pediatric Nutrition Surveillance System—data on nutritional status of children five years old and under for federally funded programs
	7. Increase in the number of pediatric clinics in at-risk communities with expertise in product safety and environmental conditions/hazards that influence health	7. American Dietetic Association's Evidence Analysis Library
		8. Reports and report cards on children's health

[a] The actions, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE
Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 10: OLDER ADULTS
Enable the provision of needed services and programs to foster healthy aging

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Increase older adults' (especially older adults from racial, ethnic, and other underserved groups) access to and use of preventive healthcare services (e.g., annual influenza and the pneumococcal vaccination, prostate screenings, mammography) through community-based and clinical partnerships and other innovative approaches 2. Establish partnerships between the business sector, medical and health providers, and community-based organizations to ensure that older adults (especially older adults with multiple chronic conditions) have access to appropriate medical, dental, nutritional, and social services, as well as to evidence-based, self-management programs 3. Increase the number of accessible home and community-based provider and caregiver training programs 4. Increase the number of older adults living in frontier, rural, urban, or tribal communities who have access to core services (e.g., nutrition/meal, transportation, and respite care) provided by area agencies on aging 5. Support collaboration among the Aging Network, federally qualified health centers, aging or other organizations committed to aiding older adults, and/or state and local offices of minority health to ensure access for older adults from racial and ethnic minority groups 6. Incentivize the implementation of Naturally Occurring Retirement Communities (NORCs) or similar community aging-in-place models that enable the coordination of community-based services for older adults who live in medically underserved areas (MUAs) and/or health providers shortage areas (HPSAs)	1. Number and distribution of community- and home-based caregiver training programs 2. Number and distribution of evidence-based health, wellness, and safety programs for older adults 3. Decrease in emergency room visits and short-term hospitalizations among older adults 4. Number of older adults from different racial, ethnic, and underserved populations who have access to and receive core services 5. Number of NORCs or similar models implemented within MUAs/HPSAs	1. Medicare, Medicaid, and long-term care data 2. Agency for Healthcare Research and Quality's National Healthcare Disparities Report (NHDR) 3. Administration on Aging's Aging Integrated Database and National Aging Program Information System (NAPIS) 4. Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System data 5. Federal Interagency Forum on Aging-Related Statistics 6. The State of Aging and Health in America Report 7. The National Archive of Computerized Data on Aging 8. National Center for Health Care Statistics 9. Medical Expenditure Panel Survey (MEPS) 10. American Dietetic Association Evidence Analysis Library 11. U.S. Department of Labor, Registered Apprenticeship Office 12. Bureau of Labor Statistics

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE
Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 11: HEALTH COMMUNICATION
Enhance and improve health service experience through improved health literacy, communications, and interactions

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Develop health education materials in primary languages spoken by communities to communicate important health messages and improve availability of information on how to access services	1. Number, content, and distribution of health communication materials developed in primary languages spoken by the surrounding community	1. National Center for Education Statistics' National Assessment of Adult Literacy—health literacy component
2. Use culturally and age-appropriate avenues and direct-to-consumer methods to deliver health and safety messages to individuals with limited English proficiency or low-level or marginal literacy skills	2. Content of health education efforts that use e-marketing and interactive media to engage and communicate information on disease prevention, injury prevention, health promotion, and health protection	2. National Center for the Study of Adult Learning and Literacy—resources and briefs on health literacy
3. Expand the use of eHealth marketing, mobile and interactive media, and social networking to engage and communicate information about disease and injury prevention, health promotion, and health protection	3. Application of guidelines on health literacy by medical and healthcare programs, professional associations, and social support institutions and networks	3. Ambulatory Care Experience Survey and Primary Care Assessment Survey —data from items/subscales related to patient perceptions of communication with provider
4. Enhance and disseminate guidelines for effective health literacy efforts and support the integration of health literacy training into the activities of social support institutions and networks	4. Patient satisfaction with their healthcare providers	4. Health literacy advocacy organizations and public and private sector organizations reporting adherence to guidelines
5. Establish and disseminate guidelines to medical and healthcare training programs and professional health associations for effective clinical and other health care encounters and patient-provider communication	5. Increase in healthcare providers (e.g., physician offices, hospitals, community clinics) that survey consumers about their satisfaction and interactions with their providers	5. Accreditation Association for Ambulatory Health Care and The Joint Commission
6. Promote development of clinical tools to improve identification of and communications with at-risk patients (e.g., limited health-literate patients) as part of ongoing improvement initiatives		6. Office of Disease Prevention and Health Promotion's National Action Plan to Improve Health Literacy

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE

Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 12: EDUCATION

Substantially increase, with the goal of 100%, high school graduation rates by working with schools, early childhood programs, community organizations, public health agencies, health plan providers, and businesses to promote the connection between educational attainment and long-term health benefits

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Develop and implement local strategies to reduce health, psychosocial, and environmental conditions that affect school attendance and chronic absenteeism	1. Policies and programs enacted to reduce barriers to school attendance and high school graduation, improve the quality of school environment, and support parent engagement	1. Analysis of local, state, and national polices for information and emphasis on high school graduation
2. Develop effective strategies for supporting parents and other caregivers in addressing the psychosocial and environmental factors that impact their children's lives	2. Number of school programs that incorporate concepts of health disparities, health equity, and determinants of health into their curriculum	2. Centers for Disease Control and Prevention's School Health Programs and Policies Survey, School Health profiles, and Youth Risk Behavior Surveillance System
3. Improve school environment, culture, and other conditions (e.g., healthier food options, physical activity opportunities, anti-bullying programs, adequate staffing and staff training, playground modifications, safe transportation) to support students' readiness and ability to learn	3. Number of scholarships among diverse categories of students (e.g., racial and ethnic minority, disabled and low income)	3. Philanthropic organizations such as the Annie E. Casey Foundation Kids Count Data—state-level data on education
4. Encourage the introduction of concepts about health disparities, health equity, and determinants of health as part of the K-12 curriculum in schools	4. Number of students of different racial, ethnic, gender, LGBT, and disability groups from high school, community colleges, colleges, and universities who pursue a health-related degree	4. National Center for Higher Education Management Systems—public high school graduation rates by year and by site
5. Improve health career pipeline by providing health care-related courses and transition assistance to students from racial, ethnic, and other underserved communities	5. Increased graduation rates, especially among students from racial, ethnic, and underserved groups	5. U.S. and State Departments of Education, Bureau of Indian Affairs, and Bureau of Indian Education— graduation rates
6. Increase investment in strategies to decrease academic achievement gaps (particularly in math and science) among students from racial and ethnic minority groups and low-income families, and increase their opportunity for higher education or career-oriented alternative program	6. Decrease in academic achievement gaps, especially in math and science	6. National Center for Education Statistics 7. College and university financial aid awards by race, ethnicity, and income of recipients 8. National Association of Student Financial Aid Administrators

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 3: HEALTH SYSTEM AND LIFE EXPERIENCE
Improve health and healthcare outcomes for racial, ethnic, and underserved populations

STRATEGY 13: SOCIAL AND ECONOMIC CONDITIONS
Support and implement policies that create the social, environmental, and economic conditions required to realize healthy outcomes

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Improve the availability, accessibility, affordability (e.g., fresh food financing initiatives, neighborhood store incentives, Electronic Benefits Transfer (EBT) cards at farmers markets), and consumption of healthy, safe, and nutritious food for all families	1. Use of health impact assessments and application of assessment findings by public agencies, corporations, and foundations	1. Local, state, and tribal governments and corporations
2. Improve safety of and accessibility to public transportation, walking, and bicycling (e.g., interconnected street strategies, public transit-oriented development), especially in urban communities	2. Number and location of supermarkets, convenience stores, and fast food restaurants	2. Institute for Disease Control and Prevention's Behavioral Risk Factor Surveillance System
3. Improve safety and accessibility of transportation to resources and services in rural and geographically isolated communities	3. Expenditures on public and private recreational facilities	3. U.S. Census Bureau—data on retail trade companies
4. Improve housing quality, affordability, stability, and proximity to resources (e.g., housing code enforcement, location of resources, transit system, and mixed-income development)	4. Fatality rates for pedestrians and cyclists	4. Progress Grocer's—Annual Reports of the Grocery Industry
5. Improve neighborhood conditions (e.g., policies that support crime prevention through environmental design, community problem-oriented policing, etc.) to support healthier living environment	5. Percent of households reporting unsatisfactory or no public transportation in residential areas	5. U.S. Census Bureau's Census of Governments
6. Monitor and improve air, water, and soil quality (e.g., enforcement of national water standards, effective lead abatement programs, properly ventilated office and school buildings, etc.) in places where people learn, work, live, play, and age	6. Design Value (i.e., air quality status of a given area relative to the level of EPA's National Ambient Air Quality Standards), Air Quality Statistics, Air Quality Index	6. Pedestrian and Bicycle Information Center—www.pedbikeinfo.org
7. Ensure employment opportunities for people from different racial, ethnic, and underserved populations and enhance their labor market participation through targeted employment initiatives, job training, networking opportunities, and monitoring of employers' compliance with fair pay regulations	7. Number of violations, by year and state, for federally regulated drinking water contaminants	7. American Housing Survey and National Household Travel Survey
8. Support programs and initiatives (e.g., through financial literacy programs, maximum use of earned income tax and child tax credits) to empower families from different racial, ethnic, and underserved populations to save, enhance, and sustain their abilities to live a healthy life and accumulate wealth	8. Labor force participation rates	8. U.S. Environmental Protection Agency's air trends and safe water reports
9. Expand and strengthen safety net opportunities to ensure services are developed to support individuals and families	9. Expenditures on safety net programs	9. U.S. Bureau of Labor Statistics
10. Strengthen disaster and emergency preparedness plans by accounting for the needs of populations that are vulnerable and underserved (e.g., older adults, people with disabilities, linguistically isolated families, low-income families)	10. Income-to-spending ratios	
11. Seek stronger partnership between community organizations, businesses, and community colleges to create pathways for youth and adult learners from different racial, ethnic, and underserved groups to acquire the skills that will lead to greater economic opportunities		
12. Encourage joint learning and collaboration across sectors to adopt plans to assess (e.g., through racial-impact analysis)		

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

Goal 4. Cultural and Linguistic Competency: Improving Cultural and Linguistic Competency and Diversity of Health-Related Workforce

Cultural and linguistic competency reflects and builds on the premise that understandable communication is a necessity of any successful endeavor. The recipient must understand words and text; otherwise the exercise of providing them is meaningless. Thus, the essential first step in communication is simply to be clear. Understandable messages require, at the most basic level, communication in a language that the recipient understands. Knowledge and accommodation of cultural factors as well as an atmosphere of mutual respect and cooperation are necessary for effective communication.

Cultural humility is an important component of cultural competency. It is the notion that providers can exercise self-awareness in order to foster respectful partnerships with patients. It "incorporates a lifelong commitment to self-evaluation and critique, to redressing the power imbalances in the physician-patient dynamic, and to developing mutually beneficial and non-paternalistic partnerships with communities on behalf of individuals and defined populations."[298]

Awareness of the cultural values, beliefs, and practices of different racial and ethnic groups can help healthcare providers understand and address their unique risk factors. For example, South Asians consume Ayurvedic medicines that may expose them to toxic metals. If such individuals present in a clinical setting with toxicity symptoms, it would be helpful if the consumer volunteered or if the practitioner, through a personalized medical history, understood the toxicity potential and was prepared to obtain critical information to provide the necessary care.

> "Learning from other minority groups was the best. It is important to know how our brothers and sisters from other ethnic groups feel."
>
> –NPA Regional Meeting participant

As language diversity in the United States grows, there is a critical need to ensure that language access services are available in healthcare settings for the expanding number of Limited English Proficient (LEP) patients. The IOM *Unequal Treatment Report* noted that "language barriers can cause poor, abbreviated, or erroneous communication, poor decision making on the part of both providers and patients, or ethical compromises."

The National Standards on Culturally and Linguistically Appropriate Services (CLAS) include four standards related to the provision of language access services based on Title VI of the Civil Rights Act of 1964. The standards emphasize the need for healthcare organizations to provide and assure competent language assistance services (including bilingual staff and interpreting services), inform patients of their rights to those services, and make available linguistically appropriate patient-related materials and signage.

Healthcare interpreters—bilingual professionals who facilitate communication between healthcare providers and patients—play an important part in the healthcare experience for LEP patients. It is important that in order to ensure complete, accurate and confidential communication, patients should not use family and friends as interpreters.

Continuing efforts are underway to provide cultural competency training to current and future healthcare providers and other professionals in the health and related industries. However, it is important to differentiate between receiving training in cultural sensitivity and competency and the actual translation of that training into the acquisition of skills that allow effective interaction and communication with patients. The training is not effective if the skill acquisition does not occur. Providers must possess or learn the cognitive abilities and interpersonal skills that will yield proficiency in customer service. Cultural and linguistic competencies improve collaborative goal setting, planning, and participation of patients in their own care.

Healthcare workers who share the same cultural and linguistic background as those they serve, or who have adequate training in cultural and linguistic competency, can be particularly effective in providing services. Recruitment and retention of racial and ethnic minorities into the workforce continues to be a valuable strategy for promoting cultural and linguistic competency. In addition, increased recruitment of community health workers can aid patient provider communication and mutual understanding. For example, since the 1960s, community health workers, neighborhood workers, indigenous health workers, health aids, "consejeras," and "promotoras" have fulfilled multiple functions in helping to improve health outcomes for racial and ethnic minority populations.[299] Once trained and deployed strategically, these community members assist LEP and other underserved consumers to successfully negotiate unfamiliar healthcare settings (e.g., interpreting services, explanation of insurance coverage, or availability of social services).

The three strategies below address the goal of cultural and linguistic competency through strategies based on workforce, diversity, and ethics and standards. For each strategy there is a menu of objectives, measures, and potential data sources, which are tools for stakeholders to use in implementing any given strategy.

GOAL 4: CULTURAL AND LINGUISTIC COMPETENCY

Improve cultural and linguistic competency and the diversity of the health-related workforce

STRATEGY 14: WORKFORCE

Develop and support the health workforce and related industry workforces to promote the availability of cultural and linguistic competency training that is sensitive to the cultural and language variations of diverse communities

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Monitor health workforce composition; identify competencies needed; improve and develop appropriate education, training, and life-long learning curricula; and enhance recruitment strategies to increase the supply of qualified health professionals 2. Collaborate with the business sector and work with employers to encourage continuing education in cultural and linguistic competency (that also includes requirements for compliance with Title VI of the Civil Rights Act) for physicians, other health professionals, and administrative staff who participate in their purchased health insurance plans 3. Highlight and disseminate best practices by public health agencies and health organizations to ensure cultural and linguistic competency training and continuing education for healthcare providers and healthcare administrative staff 4. Develop and integrate model cultural and linguistic competency training courses and modules, particularly on cultural humility, into workforce development programs and undergraduate and graduate professional programs in medicine, dentistry, nursing, allied health, mental health, public health, and environmental health 5. Assist public health clinics, health care organizations, community clinics, and other providers to implement effective language access policies, practices, and procedures that comply with Title VI 6. Use telecommunications, videoconferencing, and other technology to deliver services to people who live in geographically isolated places, have no access to transportation, and/or	1. Number and distribution of health workers, by health profession 2. Existence and use of modules that provide standardized training and continuing education on cultural and linguistic competency, including the number of credits that can be earned and percent of staff trained 3. Availability and utilization of cultural humility and competency courses and modules in undergraduate and graduate health professional training degree and certificate programs 4. Improved systematic collection and documentation of consumers' primary languages and dialects and use of findings to inform planning and provision of services 5. Allocated resources and incentives, proportionate to other key aspects of professional development, for training and continuing education in cultural and linguistic competency for physicians and other health professionals and administrative staff 6. Inclusion of cultural and linguistic competency training and continuing education as part of information in new staff orientation and criteria for job performance and licensure by accrediting bodies	1. National Center for Health Workforce and state departments of health or centers for health workforce data 2. Office of Minority Health's Cultural Competency Curriculum Modules training logs 3. Assessment of relevant professional competencies in undergraduate and graduate professional training programs through professional organizations and accrediting bodies 4. Survey of health-related accrediting bodies (e.g., The Joint Commission, Accreditation of Ambulatory Health Care, and URAC (formerly the Utilization Review Accreditation Commission) 5. Federation of State Medical Boards, Liaison Committee on Medical Education, and Accreditation Council for Graduate Medical Education data 6. Bureau of Labor Statistics' Employment and Training Administration

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 4: CULTURAL AND LINGUISTIC COMPETENCY

Improve cultural and linguistic competency and the diversity of the health-related workforce

STRATEGY 15: DIVERSITY

Increase diversity and competency of the health workforce and related industry workforces through recruitment, retention, and training of racially, ethnically, and culturally diverse individuals and through leadership action by healthcare organizations and systems

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Develop a policy agenda to expand the diversity and cultural and linguistic competency of the health care workforce	1. Number and type of policies developed and implemented by healthcare organizations, accrediting bodies, education programs, and state health agencies to support the diversification of the health care workforce	1. Survey of major health care organizations, accrediting bodies, health and allied health education programs, and state health agencies
2. Work with medical schools, boards of trustees of universities, healthcare systems, professional health associations, and health-related businesses to consider and implement a policy of inclusion in all aspects of their organizational structure and processes	2. Percent of health-related certificates/credentials and professional degrees awarded to members of racial, ethnic, and cultural groups	2. National Center for Health Workforce Analysis Reports
3. Build relationships and collaborate with higher learning institutions, including Historically Black Colleges and Universities, Hispanic-serving Institutions, and Tribal Colleges and Universities to increase recruitment of minorities into public and environmental health-related programs	3. Distribution and percent of schools of medicine and nursing and allied health professional training programs whose basic curricula include core competencies in culturally and linguistically appropriate health promotion and education and disease prevention	3. Survey of major professional health-related education associations (e.g., American Dental Education Association, American Association of Colleges of Nursing, Association for American Medical Colleges, American Academy of Physician Assistants)
4. Educate school counselors and teachers in high schools and colleges about career pathways in the health professions and work with them to support the early recruitment of youth from different racial, ethnic, and cultural backgrounds into these professions	4. Number of internship and fellowship programs in the health field for students from different racial, ethnic, and cultural backgrounds	4. U.S. Census Bureau—Special Equal Opportunity Employment tabulation
5. Increase the number of bridge programs between institutions of higher education and employers in the health sector to provide greater opportunities for students from different racial, ethnic, and cultural backgrounds and low-income families to enter the health care workforce	5. Percent of individuals from different racial, ethnic, and cultural backgrounds, by health profession and position	5. Departments of Labor, Veterans Affairs, and Defense reports

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 4: CULTURAL AND LINGUISTIC COMPETENCY

Improve cultural and linguistic competency and the diversity of the health-related workforce

STRATEGY 16: ETHICS AND STANDARDS, AND FINANCING FOR INTERPRETING AND TRANSLATION SERVICES

Encourage interpreters, translators, and bilingual staff providing services in languages other than English to follow codes of ethics and standards of practice for interpreting and translation. Encourage financing and reimbursement for health interpreting services.

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Promote codes of ethics and standards of practice for interpreting and translation 2. Assist states, healthcare financing entities, and managed care organizations to develop plans to comply with the codes of ethics and standards of practice for interpreting and translation 3. Collaborate with accrediting bodies for healthcare organizations to integrate codes of ethics and standards of practice for interpreting and translation into accreditation requirements 4. Increase the number of interpreters who meet professional standards and certification for health interpretation 5. Encourage financing and reimbursement for medical interpretation services	1. Number of accrediting bodies that include the codes of ethics and standards for interpreting and translation in their requirements 2. Degree to which federal- and state- funded health services, health financing entities, managed care organizations, and healthcare organizations use the codes of ethics and standards of practice for interpreting 3. Percent of interpreters certified by training entities that comply with the codes of ethics and standards for training and practice 4. Percent of agencies and healthcare organizations and services that adopt proper interpreting and translation as a quality improvement indicator 5. Establishment of incentives for hospitals, physicians, and other healthcare settings and health professionals to support interpreting services and compensate for additional time required for interpreting support 6. Inclusion of interpreting assistance in states' and businesses' procurement language for contracts with managed care organizations and healthcare providers 7. Allocated resources, proportionate to other key aspects of service provision used for translation and interpreting services	1. Survey of state and local health departments 2. Survey of accrediting bodies (e.g., The Joint Commission, Accreditation of Ambulatory Health Care, and URAC) 3. The National Board of Certification for Medical Interpreters and state medical interpreter networks or associations 4. American Health Quality Association and State Quality Improvement Organizations 5. Centers for Medicare and Medicaid Services (CMS) 6. State procurement or purchasing offices 7. Survey of the National Association of State Procurement Officials' membership

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

Goal 5. Data, Research, and Evaluation: Improving Data Availability, and Utilization and Diffusion of Research and Evaluation Outcomes

In 1906, noted historian and philosopher W.E.B. Du Bois published a monograph entitled *The Health and Physique of the Negro American*,[300] which sought to dispel published claims that the known higher levels of mortality and morbidity for African Americans were due to inherent racial traits. Du Bois' monograph is an early example of our nation's long history of using research to document health disparities, define their causes, and confront those conditions.

The need to coordinate and improve research and evaluation of the causes of health disparities is essential to improving the health of Americans and ending health disparities. All minority groups experience health disparities. While research to document these disparities has continued and improved, the research to identify their social and environmental determinants still lags behind—as have the development, dissemination, and translation of scientifically proven models for changing these conditions.

> "This experience reminded us all that there is most definitely a need for information sharing between organizations in order to end healthcare disparities."
>
> –NPA Regional Meeting participant

Even among local, state, tribal, and the federal governments and private sector organizations, there may be challenges in data collection, including small numbers of racial and ethnic minorities and underserved populations participating in studies and lack of standardized measurements. Larger data sets allow for more confidence in findings, as well as the ability to break findings down into smaller subsets (e.g., by racial and ethnic subpopulations or by individual behaviors or characteristics). Attention must be given to the integrity of the data collection process and to the scientific approach of collecting that data as a means for documenting the health status and needs of affected communities. Developing collaborative relationships with and among institutions that collect data on minorities and underserved populations is key to ensuring that they provide data in readily accessible forms and that they include all health disparity populations.

Similarly, there is a need to invest in community-based participatory research and community-originated intervention strategies as a means for developing capacity at the local level. Thousands of programs have been initiated, yet most are not evaluated effectively to determine whether they worked, for whom, and in what way. We cannot build on and improve local and other efforts if we do not understand what works. All programs must have the capacity to conduct basic evaluation that can add to our understanding of how to eliminate disparities. Conducting evaluations in small communities and subpopulations has frequently been a challenge. Smaller communities often do not have the means to collect baseline data and then perform follow-up data collection to measure the results of their interventions and activities.

Research coordination is a critical strategy. There is a particular need for cooperative and coordinated interdisciplinary research that can understand the complex interplay of issues related to health disparities (e.g., the underlying causes of disparities, including racism). Researchers from different disciplines and communities are often unaccustomed to working collaboratively. Furthermore, the inability to agree on the definitions of the problem, its causes, or the appropriate research methodology can inhibit progress. Without coordination and cooperation at all levels (from local communities to academia), identification and implementation of successful solutions are compromised.

Knowledge transfer is challenging but obligatory. Often, findings that may be valuable to communities are published in journals, reports, and other formats that are not widely distributed to them or easily accessible to non-research audiences. Non-traditional media should be used to disseminate data and information to improve accessibility. Improving the health outcomes of minority and underserved communities will take the combined efforts of medical scientists, statisticians, anthropologists, economists, sociologists, epidemiologists, policy analysts, psychologists, social workers, community developers, and others working in collaboration with community organizations.

The four strategies below address the goal of data, research and evaluation through strategies based on data; community-based research and action, and community-originated intervention strategies; coordination of research; and knowledge transfer. For each strategy there is a menu of objectives, measures, and potential data sources, which are tools for stakeholders to use in implementing any given strategy.

GOAL 5: DATA, RESEARCH, AND EVALUATION

Improve data availability, and coordination, utilization, and diffusion of research and evaluation outcomes

STRATEGY 17: DATA

Ensure the availability of health data on all racial, ethnic, and underserved populations

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Promote inclusion of data on race, ethnicity, gender, primary language, disability status, and sexual orientation or gender identity on federally and privately conducted or supported healthcare or public health program, activity, or survey 2. Develop and evaluate a framework and standards (e.g., security safeguards) for information management and sharing among systems and policy organizations on the collection, reporting, and use of race-, ethnicity-, health disparities-, and health equity-related data 3. Establish, support, and disseminate information about publicly available surveillance systems to track the causal, contributory, or protective impact of cultural, linguistic, environmental, and socioeconomic factors on health 4. Improve current data collection systems and efforts to increase the accuracy and consistency for how data about race, ethnicity, effects of racism, and categorization of people are gathered, analyzed, reported, and used 5. Increase and improve the inclusion of community stakeholders, particularly from racial and ethnic minority populations, in all aspects of the research and evaluation process 6. Incentivize reporting of quality of care data that can be stratified according to race, ethnicity, primary language, gender, and socioeconomic status	1. Number, accessibility, and use of health information and surveillance systems that adequately represent the conditions experienced by and facing diverse local communities 2. Number of state and federal health disparity-related reports that include cultural, linguistic, environmental, and socioeconomic factors 3. Development and legitimization of improved research designs for assessing health disparities and equity, including the inclusion of community stakeholders, particularly from racial, ethnic, and underserved populations, in all aspects of the research process 4. Distribution and type of organizations in the private, public, and nonprofit sectors, including insurers, that adhere to a common set of standards for data collection and data use, such as the collection of race, ethnicity, and language data 5. Number and distribution of community-level users of publicly available data sources (e.g., track number of unique hits for state data and possibly the number of reports generated from use of the data)	1. Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System 2. Health-related journals (e.g., American Journal of Public Health, Health Services Research)—content analyses of articles, studies, and information published 3. Center for Health Care Strategies 4. National Center for Health Statistics 5. Health Research and Education Trust and Kaiser Permanente Partnership Group's publications and policies about collection of race and ethnicity data 6. State Departments of Public Health and other state agencies 7. www.gaydata.org

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 5: DATA, RESEARCH, AND EVALUATION

Improve data availability, and coordination, utilization, and diffusion of research and evaluation outcomes

STRATEGY 18: COMMUNITY-BASED RESEARCH AND ACTION, AND COMMUNITY-ORIGINATED INTERVENTION STRATEGIES

IInvest in community-based participatory research and evaluation of community-originated intervention strategies in order to build capacity at the local level for ending health disparities

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Identify and work with community-based organizations and programs to determine and disseminate replicable best and evidence-based practices for ending health disparities 2. Work with researchers and evaluators to develop useful and practical models for evaluating community- originated intervention strategies, including new metrics from interventions that reflect communities' immediate needs 3. Engage community members and enhance their capacity to be equal partners in the conceptualization, planning, design, implementation, interpretation, evaluation, and dissemination of public health interventions, programs, and initiatives 4. Strengthen community ownership of data and research and evaluation products by promoting the principles of community-based participatory research 5. Integrate Title VI-compliant protocols into requests for research proposals and funded projects to ensure non-discriminatory practices	1. Number and type of community- originated interventions and programs identified and evaluated and application of community-generated evaluation metrics 2. Number and funding amount of research and evaluation grants and contracts for community-based, health disparities interventions and programs 3. Number of new community-originated models published in the academic literature 4. Increased funding of community-based participatory research that addresses health disparities and health equity (ensure community members are engaged in the planning, design, evaluation, and dissemination of public health education, programs, disease prevention, and emergency preparedness) 5. Number of sustained academic/research-community partnerships that adhere to community-based participatory research standards 6. Number of agencies and health funders that support community learning processes to help community members interpret, use, and discuss research and evaluation findings in equity plans for their community	1. Survey of community-originated interventions and programs 2. Local, state, tribal, and federal health agencies and health foundations (e.g., National Institutes of Health, Centers for Disease Control and Prevention, Center for the Advancement of Health Disparities Research, Robert Wood Johnson Foundation, The California Endowment, W.K. Kellogg Foundation, Health Resources and Services Administration)—review of budgets to determine proportion of funds allocated for evaluation 3. Major health journals (e.g., American Journal of Public Health, American Journal of Community Psychology, Journal of Health Care for the Poor and Underserved) 4. Community-College/University Partnerships for Health 5. Survey of local, state, tribal, and federal health agencies and health foundations to determine their support of community-based participatory research practices and community learning processes and training

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 5: DATA, RESEARCH, AND EVALUATION

Improve data availability, and coordination, utilization, and diffusion of research and evaluation outcomes

STRATEGY 19: COORDINATION OF RESEARCH

Support and improve coordination of research that enhances understanding about, and proposes methodology for, ending health and healthcare disparities

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Improve integrated and cross-disciplinary research to understand the reasons for systemic and continuous disparities in targeted health conditions 2. Evaluate best practices through research or practice-based evidence in order to identify practices or policies that have improved health outcomes and reduced health disparities 3. Encourage community-based participatory research that is inclusive of stakeholders from communities that have been historically excluded 4. Develop teaching modules that educate researchers and communities on how to develop and implement successful collaborative, health promotion and prevention research projects that address health disparities and comply with Title VI requirements	1. Increased funding of research projects, especially integrated and cross-disciplinary research projects, on health disparities and systemic barriers to health equity 2. Number and type of evidence-based best practices evaluated, disseminated, and applied 3. Increase in joint funding and co-sponsorship of health disparities research by private sector and state, tribal, and federal governments on health disparities research 4. Application of cross-training modules that educate researchers and communities about critical factors that need to be addressed in health disparities research	1. National Institutes of Health, Centers for Disease Control and Prevention, State Departments of Health, major health foundations (e.g., Robert Wood Johnson Foundation, The Commonwealth Fund), and professional associations (e.g., American Diabetes Association, American Heart Association) 2. Office of Minority Health Resource Center, Centers for Disease Control and Prevention (e.g., compendium of promising or evidence-based practices), and annual conferences of professional associations (e.g., American Evaluation Association, American Public Health Association) 3. Survey of published research in health and related fields to determine private-public sponsorship and authorship

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

GOAL 5: DATA, RESEARCH, AND EVALUATION

Improve data availability, and coordination, utilization, and diffusion of research and evaluation outcomes

STRATEGY 20: KNOWLEDGE TRANSFER

Expand and enhance transfer of knowledge generated by research and evaluation for decision-making about policies, programs, and grant-making related to health disparities and health equity

OBJECTIVES[a]	MEASURES[a]	POTENTIAL DATA SOURCES[a]
1. Facilitate the efficient translation and dissemination of culturally and linguistically appropriate interventions, as required by Title VI, that have been shown to improve health 2. Provide training and technical assistance to community stakeholders on the use, interpretation, and transmission of data 3. Provide training and technical assistance to providers, researchers, and evaluators to comply with Title VI requirements and to appropriately engage communities 4. Provide training and technical assistance to professional associations, foundations, advocacy groups, and community organizations on how to interpret and use research and evaluation findings to inform their decisions and programs 5. Promote, as a standard of practice among researchers and evaluators and their sponsors, strategies to make findings accessible, easily understood, and used by policymakers and the public to inform programming and services	1. Distribution and application of standard training and technical assistance materials on data-driven decision-making 2. Degree to which promising community practices are adopted by state, tribal, and local agencies and nonprofit organizations 3. Application of knowledge about use of data, research and evaluation findings, and community engagement in the design or improvement of programs to eliminate health disparities 4. Degree to which research and evaluation findings are used in decision-making about policies, procedures, and practices to eliminate health disparities by policy¬makers, funders, advocates, and community leaders	1. Office of Minority Health Resource Center's Capacity Building Division 2. Agency for Healthcare Research and Quality's Knowledge Transfer/Implementation Program 3. Grant submissions in response to requests for proposals distributed by federal and state agencies to eliminate health disparities

[a] The objectives, measures, and potential data sources do not directly correlate to each other, but to the strategy to which they are connected.

SUMMARY

This section provides a series of twenty charts to highlight the twenty stakeholder-developed strategies that were developed via the collaborative, grass-roots process that is described in detail in Section 1. These strategies are linked to the five NPA goals and offer a menu of options for individuals, organizations, and partnerships that seek to eliminate health disparities. The following final section outlines an approach for implementing and evaluating these community- and stakeholder-generated strategies.

Section 4: Approach to Operationalizing The National Stakeholder Strategy

Approach to operationalizing and evaluating the *National Stakeholder Strategy*

In general, there is broad agreement that no one sector can address complex issues independently and that cohesive action is a critical component for driving meaningful change. However, the existence of a national strategy that has been collaboratively developed does not in and of itself lead to the achievement of intended outcomes. Success will be dependent upon the ability of stakeholders across sectors and levels to implement and refine the national strategy and to assess progress over time.

> "What can individuals do? Individuals can change the world . . . "
>
> – Sir Michael Marmot

Operationalizing the *National Stakeholder Strategy* will take time, involve many people, and require collaboration and support. Throughout the activities for developing the Strategy, stakeholders made clear that they are ready to work together and asked for support to continue the conversations initiated in their regions and communities about ending health disparities. These requests also correspond with Congressional language which called for a national strategy for eliminating health disparities that is implemented and monitored in partnership with state and local governments, communities, and the private sector.

This section builds on the requests from stakeholders and Congressional language. It provides an implementation framework for bringing leaders together through health equity councils and how the councils can use the information from Section 3. The intent is to facilitate the ability of communities and other stakeholders to operationalize the *National Stakeholder Strategy* based on their needs and within their spheres of influence. While the ultimate goal is to reduce health disparities, the *National Stakeholder Strategy* also provides the unique opportunity to reduce duplication of efforts and improve outcomes through coordinated action, engagement of sectors beyond health, pooling of resources, and creation of new and innovative partnerships.

How Do I Get Involved In Implementing the NPA?

- Request the NPA Toolkit http://www.minorityhealth.hhs.gov/npa/
- Call 1-855-JOIN-NPA (855-564-6672)
- Visit the NPA Web site http://www.minorityhealth.hhs.gov/npa/

As the health equity councils come together, the approach embodied in the implementation framework will be further developed into a plan that outlines reasonable expectations, opportunities for collaborative decision-making, and a "doable" path forward.

Communities of stakeholders do not have to wait for the health equity councils or the implementation plan. There are immediate actions that individuals, communities, and organizations can take to engage with the NPA:

- Access the **NPA Toolkit** on www.minorityhealth.hhs.gov/NPA/ for information about the NPA, specific health disparities, materials on related issues, and creating action in communities; to link with organizations and resources for addressing health disparities; identify promising practices; learn ways to share activities currently underway to address health disparities; and provide feedback.

- Call **1-855-JOIN-NPA** to receive the NPA Toolkit; request data and resources tailored to a specific community; be connected with national or local experts who can speak about the NPA and health disparities; and receive technical assistance with implementing strategies at the community level.

GUIDING CONCEPTS AND THE IMPLEMENTATION FRAMEWORK

A set of key concepts are required for effectively guiding stakeholders throughout the process of acting on the *National Stakeholder Strategy* and monitoring their progress. They include:

- **LEADERSHIP:** Organizing or using existing groups at multiple levels for ensuring continued communications, providing leadership, facilitating coordination and partnership, and driving accountability. These groups must be capable of managing broad participation, coalescing wide-ranging actions, and creating change.

- **OWNERSHIP:** Incorporating actions that support ownership of the *National Stakeholder Strategy* by stakeholders at all levels, are inclusive, and improve alignment across sectors

- **PARTNERSHIP:** Fostering and creating new, more meaningful partnerships by leveraging existing partnerships and resources

- **CAPACITY:** Improving opportunities for individuals and organizations to participate by building capacity for all to contribute

- **COMMUNICATION:** Creating and supporting effective mechanisms for sharing information often, managing communications, and routinely celebrating success

These concepts are embodied in the five goals and 20 primary strategies described in Section 3. Collectively, they support stakeholder participation that is inclusive, operationalizes the *National Stakeholder Strategy*, promotes development of partnerships, facilitates communications across a complex network of individuals and organizations, and creates opportunities for monitoring progress.

The guiding concepts and *National Stakeholder Strategy* will be operationalized through voluntary multi-sector regional councils that can provide leadership, ensure continued information flow, and galvanize action. This coordinated approach will help ensure that all sectors are motivated to: (1) develop and implement measurable actions that address the NPA goals, strategies, and objectives within their areas of need, influence, and expertise, and (2) develop partnerships and coordinated efforts outside their areas of influence and expertise.

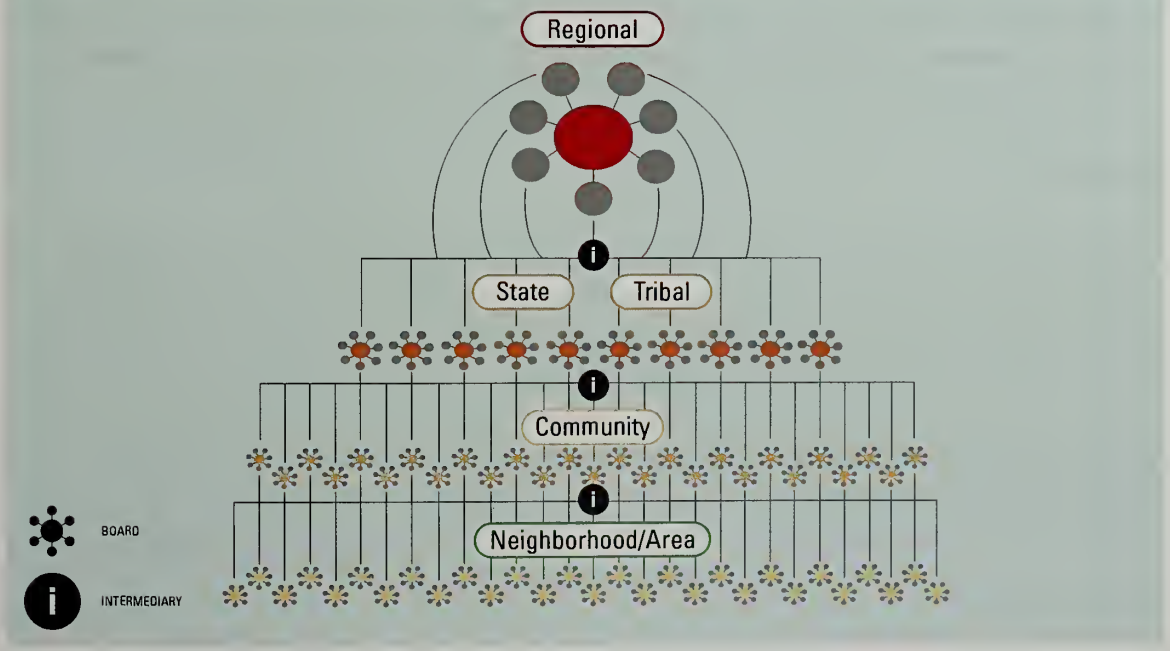
APPLYING THE IMPLEMENTATION FRAMEWORK

As described below, each of the guiding concepts will be aligned to goals and strategies to ensure the *National Stakeholder Strategy* has the most profound and efficient influence on producing far-reaching and sustained changes.

Leadership

Exhibit 4-1 depicts a leadership framework for operationalizing the *National Stakeholder Strategy*. The framework supports a view that all groups can share leadership and act as equal, cooperative partners. It models leadership where ideas and actions flow within and across levels and assume shared responsibility for collective, coordinated action.

Exhibit 4-1: Structural Model of Implementation



General Responsibilities of Regional Councils

- Serve as a body of experts for driving a collaborative health equity agenda
- Use inclusive stakeholder input to refine priority strategies
- Support and collaborate on projects of mutual benefit
- Provide lateral, cross-boundary leadership and partnerships
- Monitor and assess progress
- Assure accountability and drive sustainability

The framework includes the establishment of 10 Regional Health Equity Councils that correspond with the 10 HHS regions. The Councils will address health disparities improvement actions for their geographic areas and work to leverage resources, infuse NPA goals and strategies into policies and practices, and share stories and successes with broad constituencies. The Councils will include individuals from the public and private sectors and represent communities impacted by health disparities, state and local government agencies, tribes, healthcare providers and systems, health plans, businesses, academic and research institutions, foundations, and other organizations.

The Regional Health Equity Councils will function independently of each other to ensure that issues, strategies, and required actions are applicable to the communities in the states that the Councils represent. Some of their most critically important tasks will focus on lateral leadership (i.e., cross-boundary leadership that involves individuals and/or organizations over whom the health equity councils have no control). This type of leadership is collaborative and allows members to share common objectives and strategies, responsibility, mutual investment, and accountability for progress. Creative and informed leveraging of resources and partnerships will drive efficiencies by minimizing duplication and missed opportunities. It is anticipated that this multi-dimensional and multi-level cooperative leadership structure will lead to the natural emergence of "enlightened leadership" which can, in turn, align stakeholders and foster the goals of the NPA.

Ownership

To make the *National Stakeholder Strategy* a living document, stakeholders must decide together the actions necessary to move forward. Such participatory processes allow people to learn from one another, share their successes and challenges, feel ownership over the process and activities, challenge individual ideas and beliefs, and collectively create something better.

Ownership at the community level. Including individuals representing communities in the Regional Health Equity Councils is optimal for ensuring that strategies reach, are appropriate for, and are influenced by people at the grassroots level. It also reflects one of the NPA's guiding principles mentioned in Section 1:

Community Engagement. Establishing opportunities for engaging communities recognizes the value of individuals and brings them "to the table;" allows application of national actions in more pragmatic ways; enhances capabilities and knowledge; improves alignment on issues of importance within communities; and expands the number of people engaged and working on common objectives. It is anticipated that including participation of community representatives will catalyze and organize the discussions that are currently taking place.

***National Stakeholder Strategy* Approach to Fostering Ownership**

- Leverage stakeholder leadership
- Encourage broad participation
- Promote partnership development
- Facilitate bi-directional information flow and communications
- Enhance alignment of efforts across sectors
- Establish accountability for progress

Ownership within health equity councils. While the Regional Health Equity Councils interact with one another, they also define themselves independently. Each group has the flexibility to define its participants' roles and responsibilities, assume ownership for advancing the national strategies and actions, and determine its appropriate functions. Flexibility is of paramount importance to the success of the implementation process. It allows the use of existing infrastructure and leadership that may be most suited for ensuring success, as well as opportunities for leveraging other related efforts.

Ownership and cooperation across health equity councils. Some of the most critically important tasks of the Regional Health Equity Councils will focus on lateral leadership and partnerships (i.e., cross-boundary leadership and partnerships that involve individuals and/or organizations over whom the councils have no control). This type of leadership is collaborative and allows members to share common objectives, strategies, responsibility, investment, and accountability for progress.[10] Creative and informed leveraging of resources and partnerships will save money and drive efficiencies by minimizing duplication and missed opportunities.

Partnership

Another important avenue for organizing and providing leadership in support of the *National Stakeholder Strategy* is through partnerships. It is the power of partnerships that will keep our communities healthy. In a context of increasing demand, and increasingly limited resources, partnerships are not simply making the system more efficient; they are making it better. As described below, partnership principles will be aligned to goals and strategies to maximize individual and organizational expertise and influence, engage change agents, and pool resources to effect national change.

1. **Awareness:** Since community partnerships engage a diverse cross-section of organizations that represent health and human service institutions, nonprofit agencies, government, businesses, educational institutions, community- and faith-based organizations, they have the potential to reach a wide range of populations. By using organizational networks, media outlets, and educational approaches, partnerships have the ability to increase awareness of issues in a profound way.

2. **Leadership:** Leadership is the most often reported internal or organizational factor that helps partnerships create effective systems change.[301] Collaborative leaders broadly share power to set priorities, identify and use resources, and evaluate partnership performance.[302] A partnership must model collaboration and diversity, create the conditions that make principled leadership possible, and foster the emergence of capable, visionary leaders. Leaders must have community interests at heart and must be able to effectively share their vision for a better, healthier nation.

Steps for Building Effective Health Equity Partnerships

1. Analyze health disparity and health equity issue(s) on which the partnership will focus
2. Create awareness of issue(s)
3. Convene partnership to conduct initial planning (create vision, mission, and goals)
4. Recruit the lead agency and diverse organizational partners
5. Develop resources and funding for partnership
6. Create partnership infrastructure and procedures
7. Elect leadership and identify key staff
8. Create a partnership action plan
9. Sustain activities by actively engaging partners
10. Continuously improve the partnership through evaluation

3. **Health and Health System Experience:** When healthcare systems and providers from many disciplines are involved in partnerships, they learn the value and satisfaction of providing their professional expertise and skills within an appropriate context. They can increase their understanding and respect for unique cultural circumstances and can provide useful care, guidance, and instruction as needed. Likewise, by having members of racial and ethnic minority and other underserved communities represented in a partnership, the health system experience, communication patterns, and education activities can be tailored to better meet the health needs of the targeted community.

4. **Cultural and Linguistic Competency:** All partner organizations need to help one another communicate effectively with diverse populations that have varying cultural needs, levels of health literacy, and/or English proficiency.

6. **Research and Evaluation:** The research and evaluation component helps determine whether the partnerships and their activities are sustainable over time. Evaluation improves implementation of strategies or identifies better approaches, increases awareness and support, informs policy decisions, and contributes to the scientific understanding of what works.[303] Participatory and qualitative evaluation methods increase understanding about how and why initiatives work.

It is important that all partnerships be relationship-based, actively nurtured and managed, purposeful and specific, sustainable, and loyal to the core mission and goal of each contributor. In order to thrive, partnerships must be dynamic and responsive to culture, racial and ethnic diversity, customs, and to the ways people usually work together in the community, region, or state. Based on experiences of successful health coalitions, key steps for building effective health equity partnerships can help partners build consensus and actively involve diverse organizations that are positioned to address health disparities.

Capacity

Capacity can be defined as the ability of individuals, organizations, and groups to perform functions, solve problems, and set and achieve objectives in a sustainable manner. As stakeholders seek to implement the *National Stakeholder Strategy*, problems may arise because of gaps in human resources, financial resources, or training; a limited sense of ownership of the processes; dependency on external resources; and inadequate considerations of broader social determinants of health. Capacity building strategies will help address these challenges through the steps below, which are based on a proven process for building capacity at the individual and organizational level. They are intended to be implemented in an ongoing manner to ensure relevancy, responsiveness, efficiency, and effectiveness.

1. **Identify resources to build capacity**, which may include tools, training, and/or direct financial resources to provide assistance in areas such as leadership, program and financial management, assessment and evaluation, grant-writing, and sustainability. In addition to existing efforts to develop, test, and catalog resources, stakeholders can help identify resources they have found to be effective in efforts to reduce health disparities and can often serve as technical assistance providers for each other.

2. **Assess needs and identify required capacity building support** by using assessment tools tailored for use with groups addressing health disparities and health equity. Such tools help groups identify gaps, identify priorities and importance, identify the root causes of performance problems, and identify possible solutions (based on the resource identification activity outlined above).

3. **Leverage capacity development investments** at the local, state, and national levels that may be hindered by requirements, turf issues, and budget limitations. Strategies to improve stakeholder access to existing resources will focus on identifying and sharing information about investments and coordinating efforts within and across stakeholder groups through, for example, joint training events or joint funding announcements.

4. **Build individual capacity** by empowering individuals through access to information, inclusion and participation, and accountability. For example, one key strategy will be to develop youth as future leaders by helping them gain the ability and authority to implement change as key players in health equity council efforts to implement the *National Stakeholder Strategy*.

5. **Build organizational capacity** to carry out day-to-day activities to reduce health disparities but also to develop the capacity to learn and change in response to changing circumstances. Support for implementation of the *National Stakeholder Strategy* will include developing leaders through training, coaching, and facilitation; improving program and process management through an action toolkit and best practice compendiums; and creating and sustaining partnerships and linkages through shared stories and strategic partnership models.

Communication

Effective communication will foster greater efficiency and effectiveness across multiple sectors and levels as they operationalize the *National Stakeholder Strategy*. Key strategies will focus on the following steps:

Communication Goals of the *National Stakeholder Strategy*

- Increase awareness among key audiences of the significance of health disparities, their impact on the nation, and the actions necessary to achieve health equity.
- Help partners promote and address the goals by making them a priority and sharing information within their individual networks to broaden diffusion of information.
- Ensure cohesion in all communications and coordination between and among the leadership groups and their partners.
- Foster effective communication and sharing of information by creating dynamic feedback loops between the leadership groups to share relevant activities, policies, emerging issues, priorities, and evaluation/best practices.

1. **Building communications capacity** by equipping leaders to communicate about the *National Stakeholder Strategy* and the importance of ending health disparities through a core set of messages and a toolkit that partners can tailor and use in their own outreach and implementation.

2. **Developing materials** to disseminate messages, keep partners and the public updated, assist with implementation, and keep stakeholders engaged. Materials such as promising practice highlights, data briefs and fact sheets, and lists of resources and organizations addressing these issues can be shared through a dedicated website, E-newsletter, and social media strategies.

3. **Recruiting and engaging partners** to provide the infrastructure needed to increase awareness, drive action, and ensure accountability. Strategies may include messages and materials to support outreach and recruitment, partner engagement through electronic media and sharing of stories, and partner recognition through endorsements or award programs.

4. **Leveraging local, regional, and national media outlets** by using information technology and traditional and new media approaches such as op-eds, feature stories, case studies, and panels discussions to reach a multi-tier audience—including racial and ethnic minority communities, youth, young adults, older persons, persons with disabilities, LGBT groups, and geographically isolated individuals—to encourage action and accountability.

5. **Conducting a public information campaign** that in addition to the launch event for the *National Stakeholder Strategy* may include regular town-halls/informational meetings, coordination with National Minority Health Month and other relevant celebrations, a 12- month anniversary event, and new research with partners to gauge awareness or changes in awareness.

EVALUATING THE *NATIONAL STAKEHOLDER STRATEGY*

As mentioned previously, the NPA consists of three components of which the *National Stakeholder Strategy* is one component. The information provided here about evaluation pertains only to the *National Stakeholder Strategy*; an evaluation design for the NPA that includes the other components will be developed in the near future.

It is not prudent to construct a complete national evaluation plan until critical portions of the *National Stakeholder Strategy* become operational. Nevertheless, a model approach is helpful in illustrating how the *Strategy* could be evaluated. This approach also makes explicit the principles that could guide the design

and implementation of the evaluation. The national evaluation approach described here was developed under the guidance of a group of experts in health disparities research and in the evaluation of initiatives aimed at eliminating such disparities.

Evaluating the *National Stakeholder Strategy* is essential for three reasons. First, the "lessons learned" from developing a national evaluation will contribute to the knowledge base about what it takes to eliminate health disparities. Second, it will provide a valuable opportunity for communities to share promising practices and solutions with each other. Third, and most important, the evaluation will monitor and identify the progress and challenges facing the *National Stakeholder Strategy* in order to improve the strategies and strengthen their effectiveness, viability, and sustainability at all levels (e.g., state, tribal, regional, national).[301, 304, 305]

There is no single evaluation methodology that can address the complexities of such a comprehensive, national effort to eliminate health disparities. As evaluation proponents of comprehensive community and systems change initiatives have asserted, different methodologies will have to be combined to assess change within and across levels (e.g., state, tribal, regional, national) and sectors (e.g., education, housing, community environment).[306, 307] The evaluation will require the extensive coordination and cooperation of various data sources. It will also require building the capacity of source organizations so they can collect and report data according to the format, quality, and schedule required by the national evaluator.

Capacity building that only collects and reports data is not sufficient. A supportive strategy is also critically needed for building the capacity of regional, state, tribal, city/county, and neighborhood/area communities—so they have access to data for planning and decision making. This will involve changing the norms of some institutions to practice data-driven decision making and learning from evaluation information.

Evaluation Questions

Based on the theory of change model described in Section 3, an initial set of evaluation questions were identified by the experts who advised the development of this approach:

1. How are leaders in public agencies and in the private, nonprofit, and community sectors engaged in collaborative, efficient, and equitable working partnerships to eliminate health disparities and achieve health equity?

2. Which of the 20 strategies and their accompanying activities are being implemented at the local, state, tribal, regional, and national levels?

3. What are the impacts of the strategies and activities?

4. How well is the nation progressing toward improved outcomes that address the *National Stakeholder Strategy's* goal to eliminate health disparities and achieve health equity?

5. How much is the work to end health disparities integrated into mainstream systems, including public health?

Additional questions may be added during development of the *National Stakeholder Strategy's* evaluation plan. Further, it is likely that city/ county, state, tribal and regional agencies, as well as community and private sector organizations, will develop more questions that specifically fulfill their information needs, as they choose to conduct their own evaluations independent of the national evaluation.

Evaluation Methodologies

There are several possible methodologies for evaluating the *National Stakeholder Strategy*. Some of the methodologies may have to be combined to ensure a comprehensive evaluation that captures the complexity of the *National Stakeholder Strategy*. Some of the possible methodologies include cross-case study design, benchmarking, and longitudinal research; additional methodologies will be explored as the *National Stakeholder Strategy* is operationalized.

Cross-case Methodology

Cross-case study design (sometimes referred to as a multiple-case study methodology) is a widely accepted methodology that uses qualitative and quantitative data for studying change initiatives that are affected by events out of participants' control or implemented differently across different sites—but that may share common characteristics that contribute to the desired outcomes.[308, 309] Experts indicate that this has been a preferred method among federal agencies because of its strengths in exploring "who," "what," why," and "how" questions about a contemporary phenomenon within a real-life context.[308] The cross-case study methodology also can be useful in complementing another methodology to test a theory, and especially to uncover contextual conditions that influence a phenomenon.[308, 309] Cross-case methodology uses case studies to make generalizations by determining if similar results are consistently predicted—or if similar reasons for the results, even if contrasting, are predictable.[308]

Benchmarking Methodology

The benchmarking methodology identifies, shares, and uses best practices to improve any given action.[310] Two components are key in benchmarking: the effort to identify actions and performance that are outstanding; and transferring these best actions and performance to an organization's standards and processes.[311] Benchmarking focuses on the action steps and not strategies. Therefore, it would be part of a larger evaluation than a stand-alone methodology.

Longitudinal Research

Longitudinal research examines the relationship between certain changes (e.g., access to healthy food, improved socioeconomic status) with the anticipated outcomes (e.g., reduction in health disparities) over time. This method could be used to determine the extent to which the *National Stakeholder Strategy* contributed to the changes. Longitudinal research usually involves studying the same group of people over an extended period of time or examining historical information.

Measures of Change

The theory of change model described in Section 3 is also useful for determining the domains for the core set of measures for the national evaluation. The important first step for identifying these measures is to create common health disparities definitions and terminology to ensure uniformity at all levels and across all sectors. Once the definitions and terminology have been agreed upon, then a core set of measures can be established.

Core measures for the national evaluation should be:

- Available by race, ethnicity, education level, gender, disability, sexual orientation or gender identity, age, and other attributes that distinguish the groups affected by health disparities
- Replicable at all levels of analysis (i.e., local, state, tribal, regional, national) and across sectors (e.g., health, education, housing, business)
- Collectable across key differences such as geographic location (e.g., rural and urban areas)

Three types of measures are essential for the national evaluation, including:

1. Measures that predict changes in a person's health behaviors or conditions (predictor measures). Examples of predictor measures are the social determinants of health such as education, income, access to transportation and other services, social stressors, and the environment. These factors have repeatedly been found to be associated with a wide range of chronic diseases.

2. Measures that examine how programs are implemented or how services are provided (process measures). Examples of process measures are partnership development, quality of collaboration, and implementation of the Blueprints for Action.

3. Measures that determine if the intended results were achieved (short-term, intermediate, and long-term outcome measures). Examples of short-term outcome measures are organizational and community capacity, leadership and public will to eliminate health disparities, resources for eliminating such disparities, and goal attainment. Intermediate outcome measures are the systems and policy changes that support ending health disparities. Long-term outcome measures are the conditions for which disparities exist. These measures can, in turn, be categorized into the following: health conditions, healthcare access and utilization, and healthcare quality and workforce.

DATA ANALYSES

All the data collected can be analyzed and presented in multiple ways to capture the complexity of the *National Stakeholder Strategy*. Some potential analyses strategies and presentations include, but are not limited to, the following:

- A health equity scorecard or index where several measures can be combined and analyzed to determine how well a local community, state, tribe, or region is progressing in their efforts to eliminate health disparities

- Policy analysis where health disparities-related policies are examined and the extent to which these policies benefit a particular group of people

- Cross-sectional analysis, which can be conducted on a particular set of short-term outcomes for a group of people during a particular point in time

- Longitudinal analysis where outcomes, such as prevalence of certain diseases, could be examined over a longer period of time to detect any changes. These outcomes can be monitored at the state, tribal, and regional levels, and comparisons made

COLLABORATION, CAPACITY BUILDING, AND USE OF FINDINGS

The ability to tell the NPA story will depend, in part, on the capacity and collaboration of groups, organizations, and governments at the community, city/county, state, tribal, and regional levels to participate in and support the national evaluation. The evaluation will have to rely, in part, on the capacity of entities at each of the aforementioned levels to collect, access, and report the data needed for the national evaluation. The evaluation should include an inventory of existing state, national and other data systems to avoid duplication of efforts. Investments will need to be made to develop a data infrastructure where there is none or enhancing existing ones, as well as to build capacity to implement these infrastructures.

Building the capacity of groups, organizations, and other stakeholders to collect and report data is not sufficient. Strategies also must be developed to build their capacity to use the findings generated by the national evaluation to inform their actions and decisions on an ongoing basis. The evaluation should include strategies for translating and disseminating findings in formats that are accessible to community groups, organizations and policymakers, and should provide guidance on how to use the findings. Additionally, statewide, regional, and national conferences provide an important venue for trainings on the national evaluation and its findings. In the final analysis, the effectiveness of the *National Stakeholder Strategy* can only be assessed with the engagement of a large and diverse group of people. This is only possible by ensuring everyone has the capacity to participate and that we work collectively to apply what is learned. The health of our nation depends on it.

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Appendices

ADDITIONAL EXHIBITS

Demographic Exhibits

Exhibit A-1: United States Population Estimates, 2009
Population numbers and percentage of total

Categories	By Race	By Race and Ethnicity	
		Not Hispanic	Hispanic
White	244,298,393 (79.6%)	199,851,240 (77.3%)	44,447,153 (91.8%)
Black	39,641,060 (12.9%)	37,681,544 (14.6%)	1,959,516 (4.0%)
AI/AN	3,151,284 (1.0%)	2,360,807 (0.9%)	790,477 (1.6%)
Asian	14,013,954 (4.6%)	13,686,083 (5.3%)	327,871 (0.7%)
NHOPI	578,353 (0.2%)	448,510 (0.2%)	129,843 (0.3%)
Two or more races	5,323,506 (1.7%)	4,451,662 (1.8%)	764,464 (1.6%)
Total	*307,006,550 (100%)*	*258,587,226 (100%)*[a]	*48,419,324 (100%)*[a]

Source: U.S. Census Bureau, FactFinder, Datasets, Annual Population Estimates, 2009 Population Estimates, Detailed Tables T3-2009 and T4-2009, United States.
Percentages may not sum to 100% due to rounding effects.
AI/AN=American Indian & Alaskan Native; NHOPI=Native Hawaiians & Other Pacific Islanders.
[a]Non-Hispanics and Hispanics are 84.2 percent and 15.8 percent, respectively, of the total U.S. population 307,006,550.
http://factfinder.census.gov/ Accessed March 29, 2011.

Exhibit A-2: United States Population Density, 2008

Region	Persons per square mile	Number of persons
Northeast	339	54,924,779
Midwest	89	66,561,448
South	129	111,718,549
West	40	70,854,948
United States	88	304,059,724

Data from U.S. Census Bureau, American FactFinder, Population Finder, Map of Persons per square mile, 2008, Map TM-M2, by region.
Geographical areas are U.S. Census designations.
http://factfinder.census.gov/servlet/ThematicMapFramesetServlet?_bm=y&-geo_id=01000US&-tm_name=PEP_2008_EST_M00090&-ds_name=PEP_2008_EST&-_MapEvent=displayBy&-_dBy=040&-_lang=en&-_sse=on#?516,171

Demographics Exhibits (continued)

Exhibit A-3: United States Urban/Rural Distribution, 2000
Population numbers and percentage of total population

Geographic Location	U.S.	Northeast	Midwest	South	West
Urban	222,360,539 (79.0%)	45,226,003 (84.4%)	48,104,672 (74.7%)	73,007,539 (72.8%)	56,022,325 (88.6%)
Inside urbanized areas[a]	192,323,824	41,852,286	39,236,151	61,520,201	49,715,186
Inside urban clusters[b]	30,036,715	3,373,717	8,868,521	11,487,338	6,307,139
Rural	59,061,367 (21.0%)	8,368,375 (15.6%)	16,288,104 (25.3%)	27,229,281 (27.2%)	7,175,607 (11.4%)
Total	*281,421,906*	*53,594,378*	*64,392,776*	*100,236,820*	*63,197,932*

Source: U.S. Census Bureau, American FactFinder, Datasets, Decennial Census, Census 2000 Summary File 1, Detailed Tables P2, Urban and rural, United States and regions. Geographical areas are U.S. Census designations.

[a] An area of at least 1,000 people per square mile having a minimum residential population of at least 50,000 people.

[b] A densely settled territory that has at least 2,500 people but fewer than 50,000.

http://factfinder.census.gov/servlet/DTTable?_bm=y&-context=dt&-ds_name=DEC_2000_SF1_U&-mt_name=DEC_2000_SF1_U_P002&-CONTEXT=dt&-tree_id=4001&-all_geo_types=N&-currentselections=DEC_2000_SF1_U_P002&-geo_id=01000US&-geo_id=02000US1&-geo_id=02000US2&-geo_id=02000US3&-geo_id=02000US4&-search_results=01000US&-format=&-_lang=en

Exhibit A-4: U.S. Foreign-Born Population, 2005–2007

	Total Population	Foreign-Born Population[a]	Percent Foreign Born
United States	*298,757,310*	37,234,785	12.5%
Region I	*14,240,298*	1,623,752	11.4%
Region II[b]	*31,877,206*	5,982,290	18.8%
Region III	*28,882,189*	2,247,032	7.8%
Region IV	*58,318,548*	5,529,395	9.5%
Region V	*51,369,103*	3,605,095	7.0%
Region VI	*36,054,522*	4,299,525	11.9%
Region VII	*13,328,668*	578,377	4.3%
Region VIII	*10,230,596*	751,687	7.3%
Region IX[c]	*46,182,093*	11,467,310	24.8%
Region X	*12,200,725*	1,263,985	10.4%

Source: U.S. Census Bureau, FactFinder, Fact Sheet by state, 2005-2007 American Community Survey: Demographic estimates and social characteristics. Regional data compiled from NPA Regional Blueprints Exhibits.

[a] Individuals who were born in a country other than the United States or U.S. territories.

[b] Excludes Virgin Islands (data not available).

[c] Excludes territories.

http://factfinder.census.gov/servlet/ACSSAFFFacts?_submenuId=factsheet_0&_sse=on

Demographics Exhibits (continued)

Exhibit A-5: Country of Origin for U.S. Foreign-Born[a] Population, 2005–2007
Percentage of the total foreign-born population

	Europe	Asia	Africa	Oceania	Latin America	Northern America
United States	13.4	26.7	3.7	0.5	53.4	2.3
Region I	28.3	24.2	6.6	0.3	34.8	5.5
Region II[b]	19.6	26.3	3.7	0.2	48.9	1.3
Region III	17.5	35.7	10.7	0.4	33.8	2.0
Region IV	12.1	15.2	3.5	0.3	65.7	3.2
Region V	23.2	30.6	5.3	0.3	37.6	3.0
Region VI	5.2	17.1	2.8	0.2	73.4	1.25
Region VII	16.9	29.9	5.3	0.7	44.2	2.5
Region VIII[c]	14.6	19.4	3.7	1.6	56.6	4.1
Region IX	7.2	32.7	1.5	0.8	56.2	1.6
Region X	17.4	34.2	3.6	1.5	37.7	5.7

Source: U.S. Census Bureau, FactFinder, Fact Sheet by state, 2005-2007 American Community Survey: Social characteristics, world region of birth of foreign born. Regional data compiled from NPA Regional Blueprints Exhibits.

[a] Individuals who were born in a country other than the United States or U.S. territories.

[b] Excludes Virgin Islands (data not available).

[c] Excludes territories.

http://factfinder.census.gov/servlet/ACSSAFFFacts?_submenuId=factsheet_0&_sse=on

Health Disparities Exhibits

Exhibit A-6: Heart Attack, United States and Territories, 2008

Persons who have been told they have had a heart attack (myocardial infarction)

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*4.2*	*All*	*4.2*	*All*	*4.2*
White	4.5	Less than H.S.	8.5	Less than $15,000	8.6
Black	3.9	H.S. or G.E.D.	5.0	$15,000 – $24,999	7.0
Hispanic	3.0	Some post-H.S.	3.7	$25,000 – $34,999	5.4
Other	4.0	College graduate	2.8	$35,000 – $49,999	4.0
Multiracial	5.9			More than $50,000	2.3

Source: Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data 2008, Cardiovascular Disease.

[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/display.asp?cat=CV&yr=2008&qkey=5001&state=US

Exhibit A-7: Stroke, United States and Territories, 2008

Persons who have ever been told they have had a stroke

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*2.6*	*All*	*2.6*	*All*	*2.6*
White	2.6	Less than H.S.	5.1	Less than $15,000	7.0
Black	4.0	H.S. or G.E.D.	3.3	$15,000 – $24,999	4.5
Hispanic	1.8	Some post-H.S.	2.4	$25,000 – $34,999	3.2
Other	2.2	College graduate	1.5	$35,000 – $49,999	2.2
Multiracial	3.4			More than $50,000	2.2

Source: Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS) Prevalence and Trends Data 2008, Cardiovascular Disease.

[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/display.asp?cat=CV&yr=2008&qkey=5021&state=US

Health Disparities Exhibits (continued)

Exhibit A-8: Diabetes, United States and Territories, 2008

Persons who have ever been told by a doctor that they have diabetes

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*8.3*	*All*	*8.3*	*All*	*8.3*
White	7.4	Less than H.S.	13.4	Less than $15,000	15.1
Black	13.1	H.S. or G.E.D.	9.5	$15,000 – $24,999	12.2
Hispanic	7.5	Some post-H.S.	8.7	$25,000 – $34,999	10.2
Other	8.3	College graduate	5.8	$35,000 – $49,999	8.4
Multiracial	9.2			More than $50,000	9.5

Source. Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data 2008, Diabetes.
[a]Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/display.asp?cat=DB&yr=2008&qkey=1363&state=US

Exhibit A-9: Asthma, United States and Territories, 2008

Adults who have ever been told that they have asthma

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*13.6*	*All*	*13.6*	*All*	*13.6*
White	13.3	Less than H.S.	15.8	Less than $15,000	19.2
Black	15.2	H.S. or G.E.D.	13.2	$15,000 – $24,999	15.1
Hispanic	11.4	Some post-H.S.	14.5	$25,000 – $34,999	13.0
Other	11.6	College graduate	12.1	$35,000 – $49,999	12.6
Multiracial	14.7			More than $50,000	12.4

Source: Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data 2008, Asthma.
[a]Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).
H.S.=high school. G.E.D.=General Equivalency Diploma.
http://apps.nccd.cdc.gov/brfss/display.asp?cat=AS&yr=2008&qkey=4417&state=US

Health Disparities Exhibits (continued)

Exhibit A-10: Dental Health Care, United States and Territories, 2008

Persons who have NOT visited the dentist or dental clinic within the past year for any reason

Race/Ethnicity		Education		Income	
Category	Percent[a]	Category	Percent[a]	Category	Percent[a]
All	*28.8*	*All*	*28.8*	*All*	*28.8*
White	26.5	Less than H.S.	50.8	Less than $15,000	52.3
Black	38.1	H.S. or G.E.D.	35.7	$15,000 – $24,999	46.1
Hispanic	38.9	Some post-H.S.	29.3	$25,000 – $34,999	38.4
Other	30.0	College graduate	18.0	$35,000 – $49,999	29.9
Multiracial	31.1			More than $50,000	18.1

Source: Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence and Trends Data 2008, Oral Health.

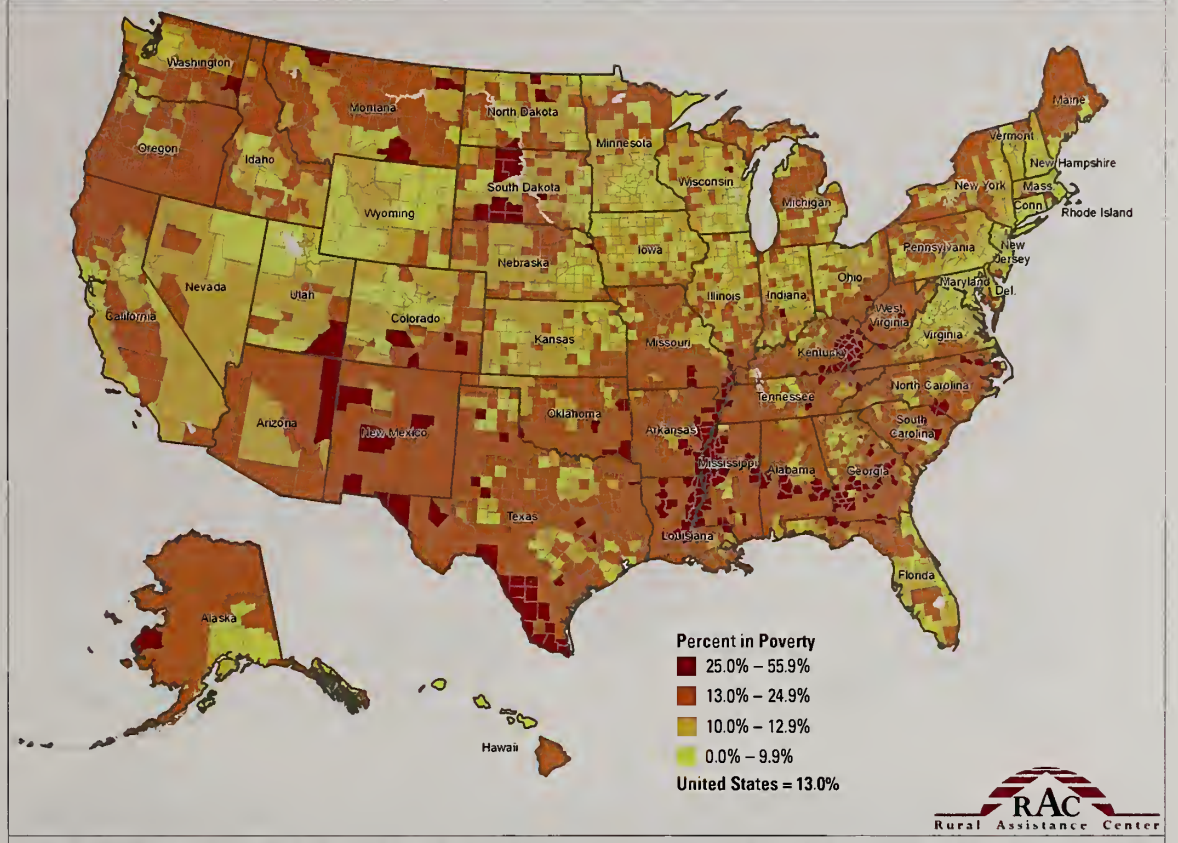
[a] Median values. Data from 50 states, DC, Guam, Puerto Rico, and the U.S. Virgin Islands (data from subgroups may not include all entities).

H.S.=high school. G.E.D.=General Equivalency Diploma.

http://apps.nccd.cdc.gov/brfss/display.asp?cat=OH&yr=2008&qkey=6610&state=US

Social Determinants of Health Exhibit

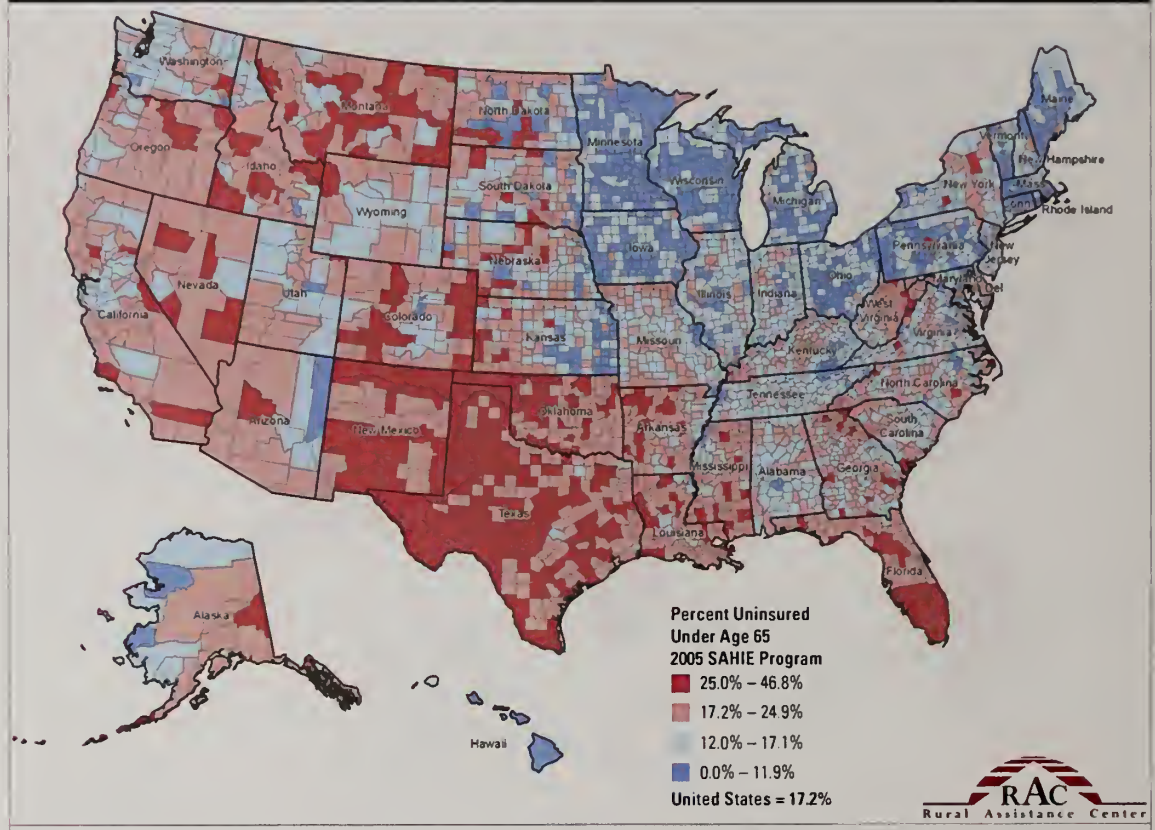
Exhibit A-11: Percent of Population in Poverty, All Ages by County, 2007



Source: U.S. Census Bureau, Small Area Income & Poverty Estimates (SAIPE), 2007. Map produced by Center for Applied Research and Environmental Systems (CARES); February, 2009.

Healthcare Costs and Coverage Exhibits

Exhibit A-12: Health Insurance Coverage Status, Percent Uninsured in 2005 by County



Source: U.S. Census Bureau, Small Area Health Insurance Estimates (SAHIE) program, October 2006. Map produced by Center for Applied Research and Environmental Systems (CARES); November, 2008.

Federal Resources Exhibits

Exhibit A-13: United States Funding from HRSA Grants, FY2008
Dollars awarded (millions)

HRSA Key Program	Region I	II	III	IV	V	VI	VII	VIII	IX	X
Health Facilities	14.38	19.63	36.09	56.87	29.71	27.96	19.13	12.37	22.25	9.64
Health Professions	19.02	38.99	31.81	73.33	39.88	31.16	13.98	14.68	35.02	16.03
Healthcare Systems	1.21	2.66	2.24	4.26	5.03	2.62	1.08	1.04	3.50	0.82
HIV/AIDS	174.04	480.07	409.13	448.94	182.64	221.02	40.09	34.85	298.42	88.08
Maternal/Child Health	51.08	88.55	109.73	148.36	139.88	89.18	41.90	37.91	77.80	29.96
Health Information Technology	7.14	6.71	5.78	7.46	9.27	3.77	1.35	6.22	8.39	4.23
Primary Health Care	113.12	184.50	164.94	378.12	237.12	219.70	12.37	104.82	274.42	143.01
Rural Health	5.50	2.10	8.82	42.88	16.24	12.62	10.22	13.18	5.55	11.44
Tele-Health	0.62	0	0.53	0.41	1.37	0.51	0.56	1.10	0.64	0.50
Total	*386.11*	*823.21*	*769.07*	*1160.63*	*661.14*	*608.54*	*205.68*	*226.17*	*725.99*	*303.71*

Source: Health Resources and Services Administration (HRSA), Geospatial Data Warehouse, Report Tools, State Profiles. Regional data compiled from NPA Regional Blueprints Exhibits, April to August, 2009 (data are updated frequently).
Numbers rounded to the nearest ten thousand dollars. Totals may not sum exactly due to rounding effects. Includes both discretionary and formula funding.
http://datawarehouse.hrsa.gov/customizereports.aspx

Exhibit A-14: United States Funding from SAMHSA Grants, FY2008/2009
Dollars awarded (millions)

Types of Funding	Region I	II	III	IV	V	VI	VII	VIII	IX	X
Formula	99.17	235.51	200.50	384.30	352.82	257.82	78.59	77.99	382.78	82.12
Discretionary	92.66	61.95	63.93	104.68	109.48	122.39	45.65	54.71	109.30	50.65
Total	*191.83*	*297.46*	*264.43*	*489.00*	*462.29*	*380.22*	*124.23*	*132.71*	*492.07*	*132.76*

Source: Substance Abuse and Mental Health Services Administration (SAMHSA). Regional data compiled from NPA Regional Blueprints Exhibits.
The funds listed for the formula grants are the amounts provided to the states in FY2009. The amounts for discretionary grants are those awarded at the close of FY2008. Discretionary grants with FY2009 dollars, when appropriated, are made throughout the fiscal year.
Numbers rounded to the nearest ten thousand dollars. Totals may not sum exactly due to rounding effects.
http://www.samhsa.gov/Statesummaries/index.aspx

Federal Resource Exhibits (continued)

Exhibit A-15: Total CDC Extramural Funding, FY2008		
Funding	**Dollars awarded (millions)**	**Percentage of total dollars awarded**
Non-Vaccine Awards	3,768.83	59.2
Vaccine Support	2,599.75	40.8
Total CDC extramural funding	*6,368.58*	*100*
Total number of CDC extramural projects funded	*3,547*	

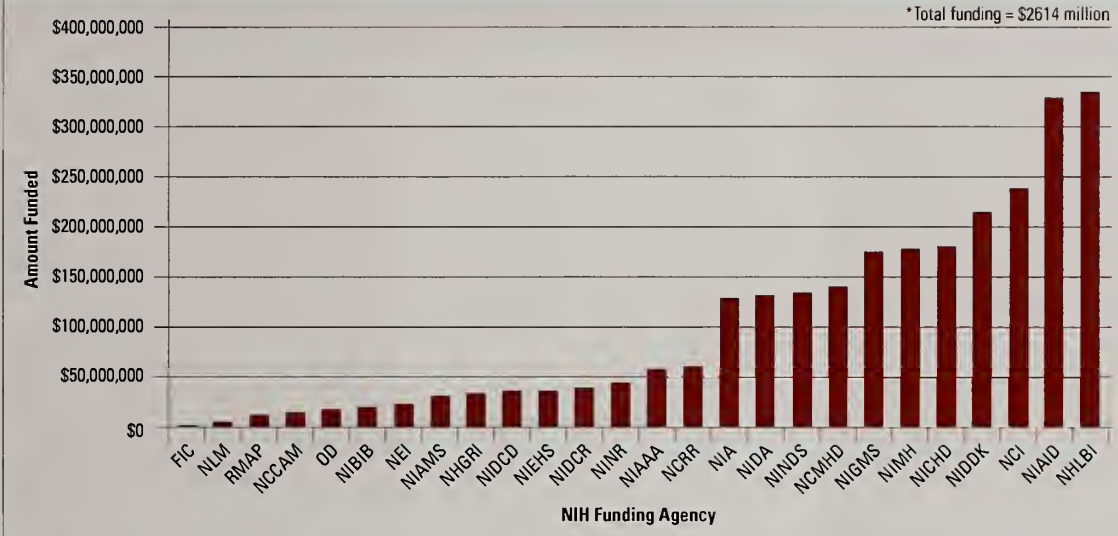
Source: Centers for Disease Control and Prevention (CDC), 2008 CDC Portfolio Assessment Summary, United States.
Dollars rounded to the nearest ten thousand dollars.

Exhibit A-16: United States CDC Funding by Sector, FY2008 Excludes Vaccine Support			
Recipient Sector	**Number of grants/cooperative agreements**	**Dollars awarded (millions)**	**Percentage of U.S. awards**
State Health Department	1,520	2,044.34	54.2
Local City/County Health Department	139	252.67	6.7
Department of Education	87	31.10	0.8
CBO/NGO	346	148.07	3.9
Academic Institutions	788	674.77	17.9
Associations/Institutes/Foundations	541	570.83	15.1
Hospitals	49	18.76	0.5
Police and Fire	3	6.46	0.2
Fiscal Agent	16	4.73	0.1
Tribal Organizations	58	16.65	0.4
Totals	*3,547*	*3,768.38*	*100*

Source: Centers for Disease Control and Prevention (CDC); 2008 CDC Portfolio Assessment Summary, United States.
Dollars rounded to the nearest ten thousand dollars. Sums subject to rounding effects.
CBO=community-based organization; NGO=non-governmental organization.

Federal Resource Exhibits (continued)

Exhibit A-17: United States Health Disparities Funding from NIH Grants, FY2008



Source: Data from National Institutes of Health (NIH). Estimates of funding for various research, condition, and disease categories; Health Disparities, FY 2008 Actual. Agency abbreviations defined in appendix.
http://report.nih.gov/rcdc/categories/#legend7

Private Resources Exhibits

Exhibit A-18: United States Foundation Grants by Subject Categories, 2007

Subject	Dollar value of grants		Number of grants	
	Amount	Percent	Number	Percent
Health	4,910,707	22.7	19,690	13.1
Human services	3,232,565	14.9	39,051	26.0
Education	4,944,387	22.8	30,099	20.0
Public affairs/society benefit	2,358,153	10.9	17,158	11.4
Science and technology	635,710	2.9	2,765	1.8
Arts and culture	2,293,719	10.6	21,527	14.3
Environment and animals	1,471,804	6.8	9,884	6.6
International affairs, development, peace, and human rights	975,900	4.5	3,566	2.4
Social sciences	295,445	1.4	1,325	0.9
Religion	452,925	2.1	5,210	3.5
Other	78,593	0.4	117	0.1
Total Grants	*$21,649,909*	*100*	*150,392*	*100.1*

Source: The Foundation Center, 2009. http://foundationcenter.org Copyright © 2009, The Foundation Center. All rights reserved.
Table headings here modified slightly from original table.
Due to rounding, figures may not add up.
Based on all grants of $10,000 or more awarded by a national sample of 1,339 larger U.S. foundations (including 800 of the 1,000 largest ranked by total giving). For community foundations, only discretionary grants are included. Grants to individuals are not included in the exhibit.
http://foundationcenter.org/findfunders/statistics/gs_subject.html

Private Resources Exhibits (continued)

Exhibit A-19: United States Foundation Grants for Special Populations, 2007

Population Group	Dollar value of grants		Number of grants	
	Amount	Percent	Number	Percent
Aging/elderly/senior citizens	310,962	1.4	3,235	2.2
Children and youth	3,565,169	16.5	35,272	23.5
Crime or abuse victims	213,079	1.0	3,358	2.2
Economically disadvantaged	5,254,351	24.3	31,358	20.9
Poor, indigent	5,009,413	23.1	27,602	18.4
Homeless	229,046	1.1	3,566	2.4
Migrant workers	15,892	0.1	190	0.1
Ethnic or racial minorities	1,513,522	6.9	14,852	10.1
General	746,594	3.4	7,328	4.9
API	67,007	0.3	863	0.6
Blacks	299,332	1.4	2,796	1.9
Hispanics	226,119	1.0	2,501	1.7
Native Americans/American Indians	92,995	0.4	831	0.6
Indigenous peoples	41,447	0.2	241	0.2
Other minorities	40,027	0.2	292	0.2
Gays or lesbians	41,169	0.2	687	0.5
Immigrants and refugees	207,106	1.0	2,341	1.6
Men and boys	302,934	1.4	3,297	2.2
Military and veterans	65,439	0.3	544	0.4
Offenders and ex-offenders	131,238	0.6	1,200	0.8
People with AIDS	482,398	2.2	1,297	0.9
People with disabilities	579,241	2.2	2,796	5.3
People with terminal illness	33,885	0.2	581	0.4
Single parents	20,903	0.1	261	0.2
Substance abusers	128,713	0.6	1,262	0.8
Women and girls	1,253,260	5.8	9,762	6.5
Not specified/general public	12,611,313	58.3	79,521	52.9

Source: The Foundation Center, 2009. http://foundationcenter.org Copyright © 2009, The Foundation Center. All rights reserved. Table headings here modified slightly from original table.
Due to rounding, figures may not add up. API=Asian & Pacific Islanders.
Based on all grants of $10,000 or more awarded by a national sample of 1,339 larger U.S. foundations (including 800 of the 1,000 largest ranked by total giving). For community foundations, only discretionary grants are included. Grants to individuals are not included in the file. Figures represent only grants awarded to groups that could be identified as serving specific populations or grants whose descriptions specified a benefit for a specific population. These figures do not reflect all giving benefiting these groups. In addition, grants may benefit multiple population groups, e.g., a grant for economically disadvantaged youth, and would therefore be counted more than once.
http://foundationcenter.org/findfunders/statistics/gs_pop.html

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List of Acronyms

ALLHAT – The Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial
A-HeFT – The African American Heart Failure Trial
AHRQ – Agency for Healthcare Research and Quality
AI/AN – American Indian and Alaska Native
API – Asian and Pacific Islander
BMI – body mass index
CDC – Centers for Disease Control and Prevention
CMS – Centers for Medicare and Medicaid Services
CNPP – Center for Nutrition Policy and Promotion
CHIP – Children's Health Insurance Program
CKD – Chronic kidney disease
CSDH – Commission on Social Determinants of Health
USDA – Department of Agriculture
HHS – Department of Health and Human Services
HUD – Department of Housing and Urban Development
ESRD – end-stage renal disease
EPA – Environmental Protection Agency
FIHET – Federal Interagency Health Equity Team
FNCS – Food and Nutrition Consumer Services
FNS – Food and Nutrition Service
GED – General Equivalency Diploma
HIT – Health Information Technology
HPSA – Health Professional Shortage Area
HRSA – Health Resources and Services Administration
IHS – Indian Health Service
IOM – Institute of Medicine
IPV – Intimate Partner Violence
LGBT – Lesbian, Gay, Bisexual, and Transgender
LEP – Limited English Proficiency
MEPS – Medical Expenditure Panel Survey
MUA – Medically Underserved Area
MUP – Medically Underserved Population
MSM – Men having sex with men
NBER – National Bureau of Economic Research
NHSC – National Health Service Corps
NHDR – National Healthcare Disparities Report

NHQR – National Healthcare Quality Report
NHOPI – Native Hawaiian or Pacific Islander
NIH – National Institutes of Health
RePORT – National Institutes of Health's Research Portfolio Online Reporting Tools
NAPIS – Administration on Aging's Aging Integrated Database and National Aging Program Information System
NIMHHD – National Institute on Minority Health and Health Disparities
NPA – National Partnership For Action to End Health Disparities
CLAS – National Standards on Culturally and Linguistically Appropriate Services
NSDUH – National Survey on Drug Use and Health
NVP – National Visionary Panel
OMH – Office of Minority Health
OHP – Office of Housing Programs
PPACA – Patient Protection and Affordable Care Act, PL 111-148
PHA – Public Housing Authority
NSLP – School Breakfast and the National School Lunch Program
SES – socioeconomic status
WIC – Special Supplemental Nutrition Program for Women Infants and Children
SAMHSA – Substance Abuse and Mental Health Services Administration
SIDS – Sudden Infant Death Syndrome
SNAP – Supplemental Nutrition Assistance Program
WHO – World Health Organization

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